

Metropolitan Transportation Commission (MTC)

Service Awareness and Usage Survey

May 2008

Overview and Research Objectives	4
Methodology Overview	5
Executive Summary	7
Recommendations for Actions	
Key Findings	
Awareness of 511	
511 Access Mode	
Source of Hearing about 511	
Correct Knowledge of 511	
 Current and Lapsed Users of 511 	
Current 511 Use	34
Previous 511 Use	
 Reasons for Lapsed Use 	36
■ 511 Access Mode	
 Types of Trips Planned Using 511 	
 511 Compared to Other Information Sources 	
 Reasons for Considering 511 Better 	
 Reasons for Considering 511 Worse 	
General Purposes for 511 Use	
 Making 511 More Valuable to Users 	45

•	Aware Non-Users of 511	46
•	Reasons for Not Using 511	47
•	Awareness of 511 Being Free	49
•	Non-Users of 511	50
•	Features Encouraging 511 Use	51
•	Benefits Encouraging 511 Use	52
•	Making 511 Valuable to Non-Users	53
•	511 Awareness and Usage Profile	54
•	Changeable Message Signs	59
•	Translink®	67
•	FasTrak	73
•	Freeway Service Patrol	89
•	Call Boxes	97
•	Awareness of MTC as Service Provider	104
•	Transportation for Commuting	105
•	Transportation for Non-Commuting	109

- > Appendix A: Additional Respondent Information
- > Appendix B: Detailed Methodology
- > Appendix C: Final Topline Report
- > Appendix D: Final Questionnaire
- Appendix E: Crosstabulation Tables

Overview and Research Objectives

- Gauge resident awareness, correct knowledge and usage of various services offered by MTC, namely:
 - 511
 - Changeable Message Signs
 - Translink®

- FasTrak
- Freeway Service Patrol
- Highway Call Boxes
- ➤ Identify the reasons why lapsed users stopped using 511, why aware residents do not use the service, and the top features and benefits of 511 that would encourage unaware residents to use 511
- Assessed perceived information accuracy of the Changeable Message Signs
- Understand why FasTrak-aware residents do not use the service, and the usage behavior of FasTrak users
- Assess whether those unaware of Highway Patrol Service and Call Boxes will find them useful
- Identify differences in correct knowledge and usage and services due to demographic, attitudinal, behavioral and geographic differences.

Methodology Overview I

GODBE RESEARCH Gain Insight

Universe 5,313,148 Adult residents in the Nine-County Bay Area

Fielding Dates
February 21 to March 2, 2008

Interview Length 10 minutes

Sample Size1800 (200 from each of the 9 BayArea counties)

➤ Margin of Error ± 2.3%

Methodology Overview II

GODBE RESEARCH
Gain Insight

In order to ensure a statistically valid sample across the nine counties in the Bay Area for segmentation analysis, each county was assigned a quota of 200 interviews. Furthermore, the data in each of the nine counties were weighted to reflect the actual proportions of the population that each one of them represents in the Bay Area. The following table illustrates the assigned quotas for each county and their weighted proportions in the entire sample of 1800.

	Quota Assigned	Sample Percentage*
Alameda	200	21%
Contra Costa	200	14%
Marin	200	4%
Napa	200	2%
San Francisco	200	12%
San Mateo	200	10%
Santa Clara	200	24%
Solano	200	6%
Sonoma	200	7%



Executive Summary

Executive Summary: Survey Parameters



Purpose:

- Assess public awareness and knowledge of MTC Customer Service Programs
 - 511
 - Changeable Message Signs
 - TransLink®

- FasTrak
- Freeway Service Patrol
- Call Boxes
- Provide marketing direction
- Provide operational direction for 511

Objectives:

- Survey the traveling public (not targeting commuters or drivers)
- Understand potential markets:
 - Those not aware of MTC customer service programs
 - Those aware of the programs but do not use them

Respondents:

- 1,800 Bay Area residents 18 years of age or older
- 200 from each of the 9 counties

Executive Summary: MTC Customer Service Program Awareness and Usage

GODBE RESEARCH Gain Insight

	% of Bay Area Residents Who			
MTC Customer Service Programs:	Are Aware of Program	Accurately Understand Program Offerings	Use Program	
511	48%	38%	22% (current and lapsed)	
Changeable Message Signs	83%			
TransLink®	20%	9%		
FasTrak	90%		27%	
Freeway Service Patrol	27%			
Call Boxes	78%			
MTC as provider of services	2%			

>Top sources for reading or hearing about 511:

- Banners (20%)
- Word of mouth (13%)
- Radio ads (12%)
- Highway signs (10%)
- TV ads (10%)*
- Newspaper ads (10%)*

*Note: A 511 TV or newspaper ad campaign has never been conducted. Respondents could mean TV or news stories mentioning 511, or they could have assumed TV and newspapers were where they heard of 511, since these sources are where they typically get most of their information.

- An estimated 22 percent of Bay Area residents have used 511
- → 48 percent used 511 to plan occasional trips, 16 percent to plan regular trips, and 25 percent both regular and occasional trips
- → 37 percent of drive-alone commuters and 45 percent of transit-riding commuters have used 511 in the 12 months prior to the survey
- Below are the top uses of 511:

Drive-Alone Commuters (n = 213)

- Information on traffic conditions (49%)
- ➤ Public transit trip planning (26%)
- Information on public transportation (14%)
- Information about planned transportation disruptions (13%)

Transit-Riding Commuters (n = 94)

- Information on public transportation (45%)
- Public transit trip planning (26%)
- Information on traffic conditions (25%)
- Estimate driving times (12%)

- ➤ 63 percent of 511 users thought the service was better than other sources providing transportation information; only 7 percent thought 511 was worse.
- Top cited reasons for 511 being better:
 - Easy or quick access (47%)
 - Accurate or up-to-date information (31%)
 - Comprehensive information in one place (27%)
- There was no substantive suggestion for making 511 more valuable.
 - 48 percent either said "Nothing" or could not think of a suggestion
 - Remaining responses were very diffused, with no specific improvement clearly standing out

Executive Summary: Market Potential – Unaware Non-users of 511

GODBE RESEARCH Gain Insight

- An estimated 62 percent of Bay Area residents are unaware of 511, and therefore have not used it, representing the highest market potential
- Below are the defining characteristics of the 511-unaware non-users, in comparison to the actual demographic characteristics of the overall Bay Area population (with greater than 3% difference):

Drive-Alone Commuters (n = 703)

- Younger adults: 22 percent 18 to 29 years of age (vs. 18% of overall Bay Area population)
- More Hispanics/Latino(a)s, at 22 percent (vs. 18% of overall Bay Area population)
- More from Santa Clara County, at 32 percent (vs. 24% of overall Bay Area population)
- Longer commuting distance: 24 percent commute between 5 to 20 miles (vs. 19% of overall Bay Area population)

Transit-Riding Commuters (n = 147)

- More Female, at 57 percent (vs. 51% of overall Bay Area population)
- Older adults: 27 percent 60 or older (vs. 22% of overall Bay Area population)
- More Hispanics/Latino(a)s (31%) and Asians (25%) (vs. 18% and 21%, of overall Bay Area population, respectively)
- Less educated: 36 percent high school or less (vs. 22% of overall Bay Area population)
- ➤ Lower income: 43 percent with gross annual household income under \$50,000 (vs. 24% of overall Bay Area population)
- More from Alameda County, at 27 percent (vs. 21% of overall Bay Area population)
- Shorter commuting distance: 46 percent less than 5 miles (vs. 37% of overall Bay Area population)

Executive Summary: Top Features and Benefits Encouraging Future 511 Use

GODBE RESEARCH
Gain Insight

Drive-Alone Commuters (n = 592)

- ➤ Top features making non-users in this segment more likely to use 511:
 - Transportation information in the event of emergencies (79%)
 - Information on traffic conditions (73%)
 - Airport information (61%)
 - Estimate driving times (61%)
 - Information about planned transportation disruptions (58%)
- ➤ Top benefits making non-users in this segment more likely to use 511:
 - Reduces stress due to knowing what's going on (74%)
 - Helps avoid recurring congestion (69%)
 - Gets to destination faster (68%)
 - Helps plan trip ahead of time (67%)
 - Gets to destination on time (65%)

Transit-Riding Commuters (n = 120)

- ➤ Top features making non-users in this segment more likely to use 511:
 - Transportation information in the event of emergencies (88%)
 - Information on traffic conditions (81%)
 - Information about planned transportation disruptions (75%)
 - Airport information (75%)
- ➤ Top benefits making non-users in this segment more likely to use 511:
 - Helps plan trip ahead of time (85%)
 - Gets to destination on time (82%)
 - Helps manage schedule in response to changes in travel time (82%)
 - Helps avoid traffic incidents and unexpected slowdowns (80%)
 - Reduces stress due to knowing what's going on (78%)

Executive Summary: CMS



- 83 percent reported having noticed the Changeable Message Signs (CMS) on freeways. Lack of awareness was higher among:
 - Women
 - 18 to 29, or 60 and older
 - Asians
 - Some college-level education or less
 - Annual household income of less than \$50,000
 - Public transit users
 - Residents of Solano and Sonoma counties
- > 82 percent of the CMS-aware respondents found the information very (29%) or somewhat accurate (53%)
- 72 percent of the 295 CMS-unaware respondents thought that such a service would be useful to them

Executive Summary: Translink®



- An estimated 9 percent of Bay Area residents have correct knowledge of Translink®
 - Even though 20% said they have heard of Translink®
- Lack of awareness was especially high among:
 - 60 and older
 - Hispanic
 - Drive alone for commuting and non-commuting purposes
 - Reside in Napa, San Mateo, Santa Clara, and Sonoma counties

- 90 percent of the respondents have heard of FasTrak
- 27 percent of the respondents reported being FasTrak users, especially:
 - **30 to 59**
 - Caucasian
 - College or higher education
 - Annual household income of more than \$100,000
 - Residents of Alameda, Contra Costa, Marin, and San Francisco counties
- 39 percent of users reported using FasTrak for daily commuting (at least 4 times a week)
- Bay Bridge (47%), Golden Gate Bridge (18%), and San Mateo Bridge (16%) were the most frequently crossed bridges using FasTrak lanes
- ▶ 96 percent of users thought that crossing bridges with FasTrak was somewhat (21%) or significantly faster (75%) than paying cash, especially on
 - Dumbarton and Benicia bridges
- 57 percent of users reported leaving their FasTrak transponders out, while 43 percent put them away
 - Top reasons for putting transponder away included concerns about car transponder theft (27%), poor aesthetics (22%) and privacy concerns (12%)

Executive Summary: FasTrak Non-Users

- 63 percent of those aware of FasTrak were non-users, especially:
 - Younger than 45 or older than 60 years
 - Caucasian
 - High school education or less
 - Annual household income of less than \$50,000
 - Mostly use I-680
 - Residents of Napa, Santa Clara and Sonoma counties
- ➤ 51 percent of the FasTrak-aware non-users did not use FasTrak because they crossed bridges too infrequently
- 10 percent of the respondents were unaware of FasTrak, especially:
 - Women
 - 18 to 29
 - Hispanic
 - High school education or less
 - Annual household income of less than \$50,000
 - Residents of Napa, Santa Clara and Sonoma counties

Executive Summary: Freeway Service Patrol



- 27 percent reported being aware of the Freeway Service Patrol, especially:
 - Men
 - Household income of \$50,000 to \$99,999
 - Frequently users of I-80 and I-880
 - Residents of Alameda and Contra Costa counties
- Lack of awareness was higher among:
 - Women
 - 18 to 29
 - Residents of Napa, San Francisco, and Sonoma counties
- 66 percent of those unaware of FSP would find such a service useful, especially:
 - 18 to 59
 - Hispanic, Asian, or African American
 - Mostly drive on I-80, I-880, and I-580
 - Residents of Alameda and Marin counties

Executive Summary: Call Boxes & Awareness of MTC as Service Provider



- > 78 percent reported being aware Call Boxes. Lack of awareness was higher among:
 - 18 to 44
 - Hispanics and Asians
 - High school education or less, or graduate degrees
 - Annual household income of less than \$50,000
 - Residents of Santa Clara and Solano counties
- 72 percent of those unaware of Call Boxes thought such a service would not be useful to them
- Only 2 percent correctly identified MTC as the provider of transportation information services in the Bay Area, including Translink, FasTrak, and 511
 - 59 percent could not name the public agency that provides
 - 26 percent thought Caltrans is the provider

- ➤ 60 percent of commuters drive alone, 13 percent ride public transit, 6 percent use carpools/vanpools, and 10 percent use other transportation modes
- Almost 45 percent reported commuting less than 10 miles, 17 percent 10 to 30 miles, and 8 percent more than 30 miles
 - Among the drive-alone commuters, 50 percent reported commuting less than 10 miles, 16 percent 10 to 30 miles, and 7 percent more than 30 miles
 - Among the transit-riding commuters, 50 percent reported commuting less than 10 miles, 10 percent 10 to 30 miles, and 6 percent more than 30 miles

- Marketing is critical to increasing 511 knowledge and usage
 - 52 percent of Bay Area population has not heard of 511
 - 62 percent of Bay Area population does not know what 511 offers
 - Among the 16 percent who know about 511, but do not use it:
 - 55 percent reported no reason to use it
 - 22 percent did not know it is free
 - 9 percent does not know what it offers
- Marketing needs to educate residents about what 511 offers, as simple name recognition is not enough
 - 48% have heard of 511, but only 38% actually know what it offers
- Greatest market potential exists among the unaware non-users (62%), especially the drive-alone commuters who account for the largest Bay Area population segment (60% commute by driving alone)
- Continue to market to transit-riding commuters, as close to half (45%) of this population segment use 511 tools.

Emphasize the following messages:

- What it offers: Convenient, accurate, comprehensive and customized information at your fingertips
- 511 is there for you...
 - To plan ahead and know what to expect
 - To avoid delays when traffic conditions are exceptionally bad
 - To plan your transit trips
 - To plan your travel to occasional destinations (e.g., the airport)
 - In the event of emergencies

Emphasize the following to correct misconceptions about 511:

- It is free
- Everyone has a reason to use 511, because we all make out-of-theordinary trips
- Most users say it provides better information than other sources
- It is offered on both phone and the web

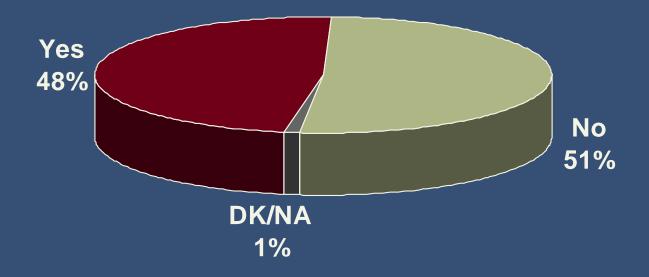
- In terms of marketing channels, placing media ads would be most effective, especially on radio, in newspapers and on television, as they provide more time and space for featuring 511 information and benefits than highway signs.
- > 511 Operational Direction:
 - 511 information supports the occasional or unfamiliar trip, such as going to the airport or in the event of an emergency
 - Nearly half of 511 users did not have suggestions for improving the service
 - Nothing stands out as a "killer application" or "key improvement" that would drive more usage

- In terms of the overall visibility of MTC and the services it provides to Bay Area residents, there is a significant opportunity to increase public awareness.
- For CMS, promote the high awareness rate (83%) and the high information accuracy rate (82%).
- For Translink®, there exists a big opportunity to boost awareness as this service becomes more widely available.
- For FasTrak, awareness is already fairly saturated. However, there is an opportunity to educate the 17 percent Bay Area residents, who either have not heard of FasTrak (10%) or are not sure it would save them time. Leverage the feedback from the existing FasTrak users, with 96 percent reporting that FasTrak gets them through bridges faster than paying cash.
- For FSP, an estimated 48 percent of the Bay Area residents would find such a service useful but are unaware of it. There could be value in promoting FSP.



Key Findings

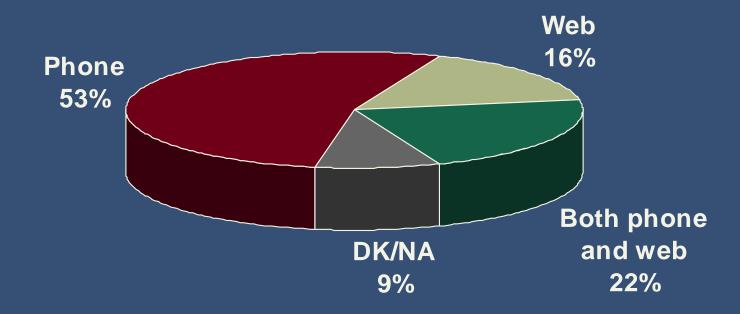
The first substantive question in the survey assessed the Bay Area residents' awareness of 511. As shown In the following chart, almost half of the residents interviewed (48%) reported having heard of 511, whereas the other half have not (51%).



511 Access Mode

GODBE RESEARCH
Gain Insight

Of the 861 respondents who were aware of 511, only 22 percent thought that the service could be accessed both by phone and on the web. Otherwise, about half the respondents thought that the service could be accessed by phone only, and another 16 percent believed that it could be accessed only on the web. Some nine percent did not know or gave no answer.



511 Access Mode Difference in Subgroups I

GODBE RESEARCH
Gain Insight

Proportionally more men than women mentioned that 511 could be accessed on the web. Those 60 years of age or older stated that 511 could be accessed on the phone, whereas those in the younger age groups mentioned that it could be accessed on the web or both by phone and on the web. Otherwise, more of the Asian respondents stated that 511 could be accessed on the web, whereas proportionally more Caucasian, Hispanic and African-American residents stated that it could be accessed by phone.

	Gender		Age			
	Male	Female	18 to 29	30 to 44	45 to 59	60 and older
Total	442	419	157	290	239	153
Phone	52.1%	54.8%	52.4%	47.6%	52.4%	63.9%
Web	20.7%	11.3%	27.1%	20.1%	12.5%	3.8%
Both phone and web	20.7%	22.4%	18.4%	28.7%	23.8%	9.5%

	Ethnicity					
	Caucasian	Hispanic	Asian	African-American	Other	
Total	443	127	189	60	18	
Phone	56.6%	67.6%	30.2%	67.7%	66.6%	
Web	9.8%	8.8%	39.4%	8.8%	6.0%	
Both phone and web	26.2%	18.6%	13.5%	16.3%	22.2%	

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

511 Access Mode Difference in Subgroups II

GODBE RESEARCH Gain Insight

Additionally, a higher percentage of the 511-aware respondents with high school education or less reported that 511 could be accessed on the phone, whereas proportionally more of those with higher education stated that it could be accessed on the web or both by phone and on the web. Similarly, substantially more of those with gross annual household income of less than \$100,000 stated that 511 can be accessed on the phone, when compared to those in the highest annual household income group.

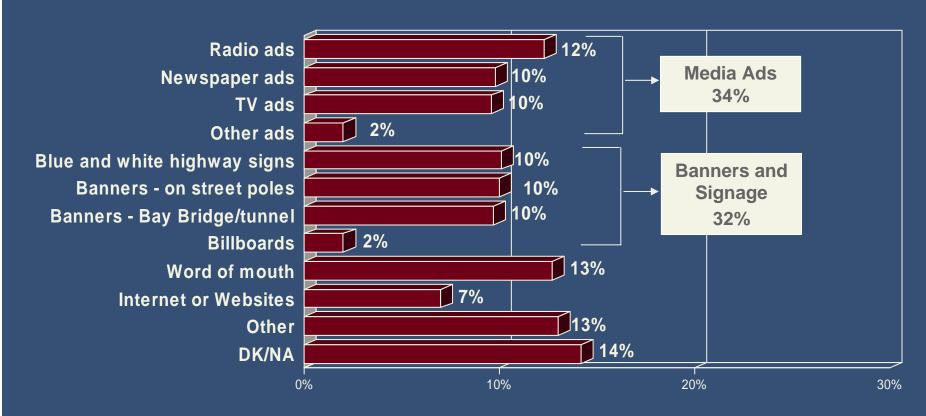
	Level of Education					
	High School or less	Technical or Some College	College Graduate	Graduate Degree		
Total	141	168	292	244		
Phone	78.4%	49.2%	49.4%	46.5%		
Web	3.9%	22.1%	15.9%	19.3%		
Both phone and web	9.8%	20.1%	25.1%	26.3%		

	Annual Household Income					
	Under \$50,000 to \$50,000 \$99,999		\$100,000 to \$149,999	\$150,000 or more		
Total	158	255	156	157		
Phone	56.9%	54.5%	52.9%	39.9%		
Web	14.2%	19.0%	13.8%	21.3%		
Both phone and web	16.2%	19.1%	27.6%	24.9%		

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

Source of Hearing about 511

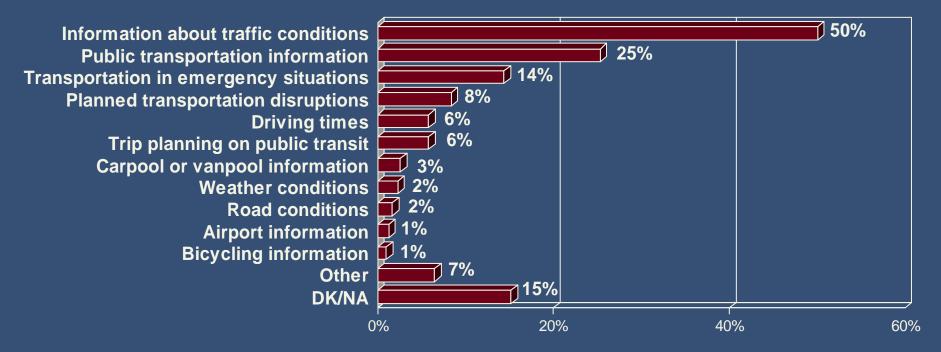
About 34 percent of the 861 respondents who have heard of 511 reported hearing about it from some type of media advertisements, including those on radio (12%), in newspapers (10%) and on TV (10%). Three out of every ten respondents learned about 511 from banners and signage. Otherwise, word of mouth was a popular source from which 13 percent reported hearing about this service, and another seven percent from the Internet or websites. In addition, 14 percent did not know or gave no answer.



Correct Knowledge of 511

GODBE RESEARCH Gain Insight

When asked about the type of information that 511 provides, traffic conditions was the most mentioned response, by a wide margin, cited by about half of the 861 respondents who have heard of 511. Following this, one out of every four respondents mentioned that 511 provides information on public transportation, and 14 percent cited transportation information in emergency situations. Among the other information types named by fewer than ten percent were planned transportation disruptions, driving times and trip planning on public transit. Effectively, even though 48 percent of the respondents said they have heard of 511, only 38 percent correctly identified 511's service features. (More information is forthcoming in the "511 Awareness and Usage Profile" section later in this report.)



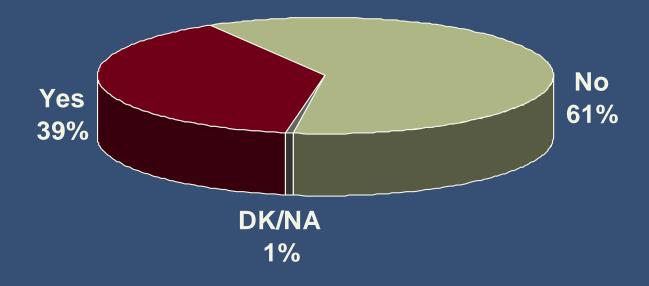


Current and Lapsed Users of 511

Current 511 Use

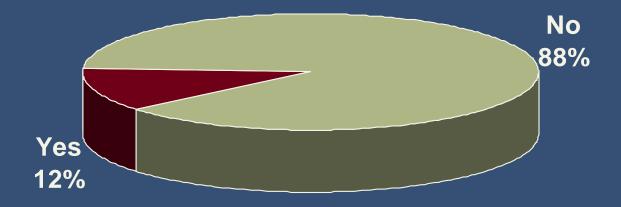
GODBE RESEARCH
Gain Insight

About 39 percent of the 861 respondents who have heard of 511 reported having used the service in the last 12 months, whereas 61 percent reported not having used this service in the past year.



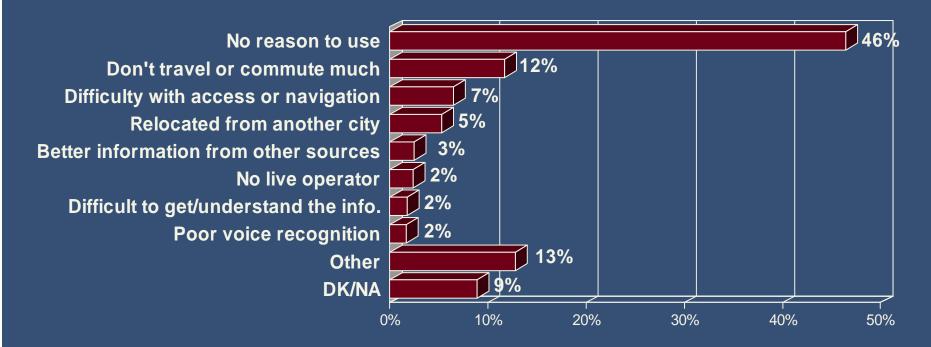
Previous 511 Use

Of the 527 respondents who did not use 511 during the last year, only 12 percent had used the service at some point prior to the 12-month period preceding the survey. The remaining 88 percent had never used 511.



Reasons for Lapsed Use

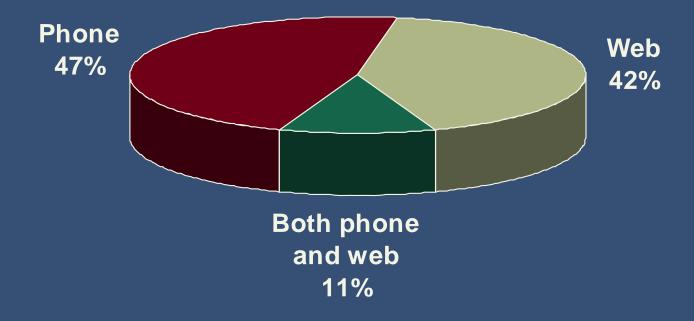
The small group of 64 lapsed 511 users were asked why they stopped using the service. By a wide margin, the top reason, cited by 46 percent, was a lack of reason to use 511. It would appear that the features of 511 were not compelling or relevant enough to these 29 lapsed users. Otherwise, some 12 percent stated that they do not travel or commute much, while fewer than 10 percent mentioned other reasons like difficulty with access or navigation (7%), relocated from another city (5%) and better information from other sources (3%).



511 Access Mode

GODBE RESEARCH
Gain Insight

About half of the 398 current and lapsed users of 511 reported accessing the service by phone (47%), and another 42 percent accessed it on the web. Only one out of every ten users accessed 511 both by phone and on the web.



511 Access Mode Difference in Subgroups

GODBE RESEARCH Gain Insight

Regardless of the chosen 511 access mode, half or more of the 511 users reported driving alone for commuting purposes. Otherwise, those who accessed 511 on the web or both by phone and on the web were more highly represented by those who typically drive alone for trips unrelated to work or school. Otherwise, about every one in three public transit users for non-commuting purposes accessed 511 by phone.

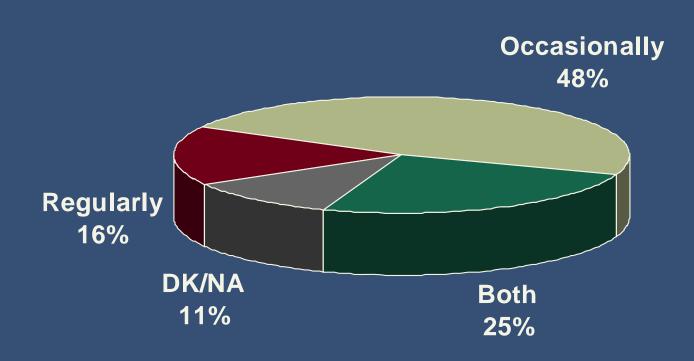
		51	11 Access Mod	de
		Phone	Web	Both phone & web
Transportation used to go to work or	Drive alone	56.2%	52.0%	64.6%
school	Public transportation	25.8%	24.1%	16.7%

		511 Access Mode			
		Phone	Web	Both phone & web	
Transportation used for trips not	Drive alone	41.1%	56.2%	64.4%	
related to work or school	Public transportation	34.6%	26.2%	17.0%	

Types of Trips Planned Using 511

GODBE RESEARCH
Gain Insight

Almost half of the 398 users reported using 511 to plan trips they took occasionally, suggesting that such usage was not for commuting purposes. Otherwise, 16 percent reported using 511 to plan trips taken regularly, while 25 percent used the service to plan both regular and occasional trips. Some 11 percent did not give an answer.



Types of Trips Planned Using 511 Difference in Subgroups

GODBE RESEARCH Gain Insight

In terms of 511 usage behavior between lone drivers vs. transit users, similar profiles were found among those who planned regular, occasional or both regular and occasional trips using 511. Meanwhile, when compared to the respondents who planned occasional trips using 511, a significantly higher percentage of those who used 511 to plan both regular and occasional trips were public transportation riders for non-commuting purposes.

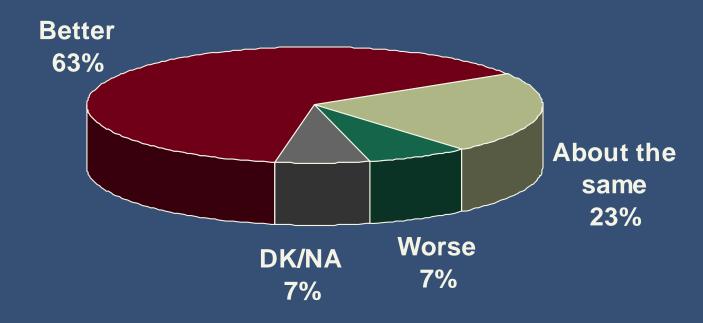
		Types of trips planned using 511			
		Regularly	Occasionally	Both	
Transportation used to go to work or school	Drive alone	58.1%	53.0%	47.6%	
	Public transportation	20.0%	29.6%	24.3%	

		Types of trips planned using 511			
		Regularly	Occasionally	Both	
Transportation used for trips not related to work or school	Drive alone	39.0%	53.8%	42.8%	
	Public transportation	29.3%	24.7%	45.2%	

511 Compared to Other Information Sources

GODBE RESEARCH
Gain Insight

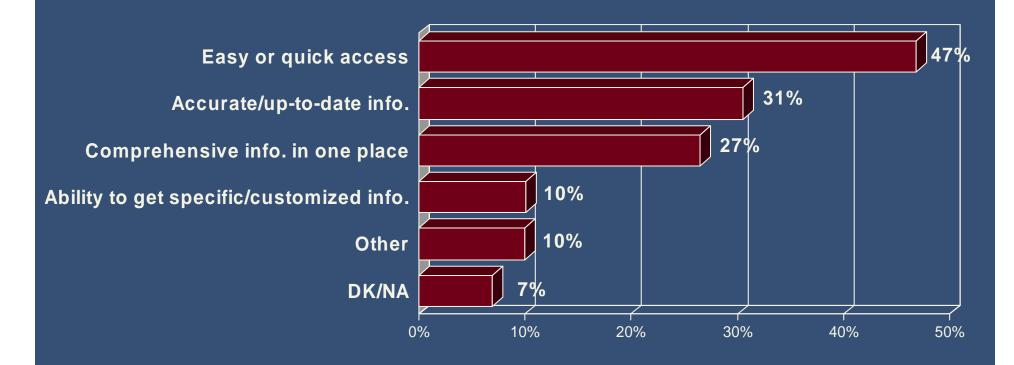
Compared to other information sources on transportation, 63 percent of the 511 users thought that it was better than other comparable sources, whereas 23 percent perceived it to be about the same. Only seven percent thought that 511 was worse than other sources providing transportation information, while another seven percent did not render an opinion.



Reasons for Considering 511 Better

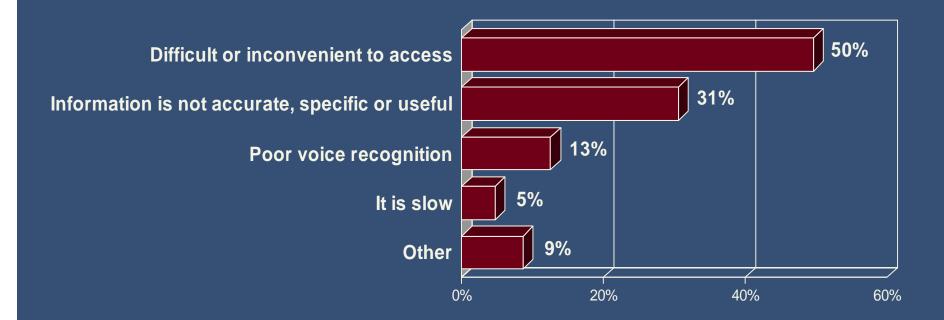
GODBE RESEARCH
Gain Insight

Of the 250 respondents who thought that 511 was better than the other available information sources, 47 percent cited its easy or quick access. Otherwise, some 31 percent mentioned accurate or up-to-date information, and another 27 percent cited getting comprehensive information in one place. Additionally, ten percent liked the ability of getting specific or customized information on 511. Extracting from these respondent comments, a tagline to promote 511 might be: "Convenient, accurate, comprehensive and customized information at your fingertips."



Reasons for Considering 511 Worse

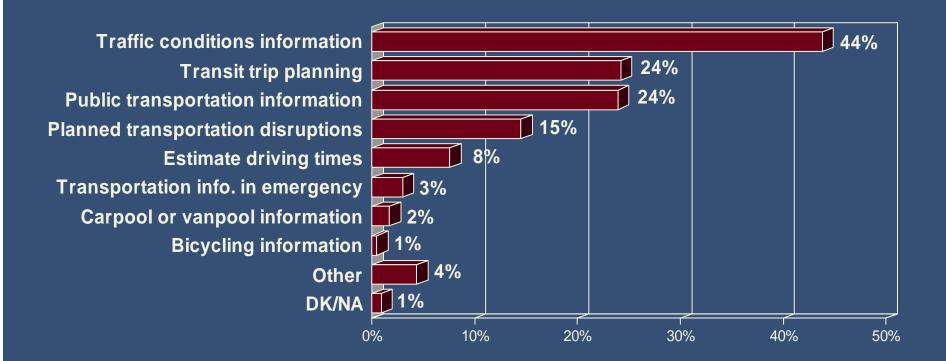
On the other hand, half of the 29 respondents who rated 511 as worse than other information sources on transportation found it difficult or inconvenient to access. Moreover, 31 percent stated that a drawback of 511 was the information not being accurate, specific or useful. Besides these, poor voice recognition and slow results were the other reasons why this small group of respondents found 511 to be worse than other sources providing information on transportation. Because of the small sample size of 29, these results are anecdotal, and should not be over-generalized.



General Purposes for 511 Use

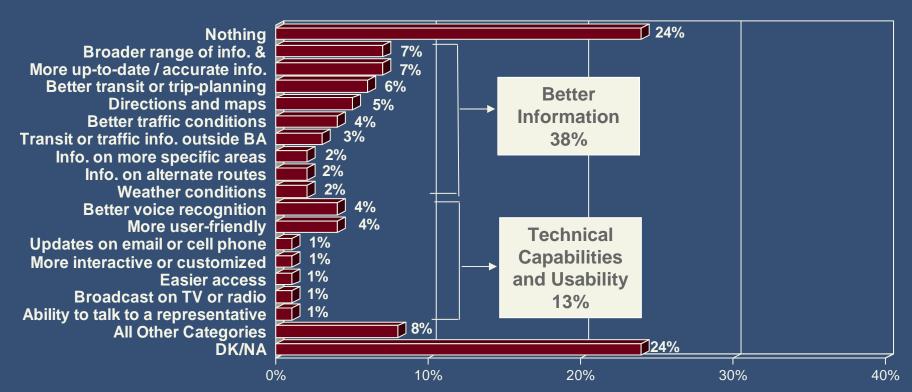
GODBE RESEARCH Gain Insight

Getting information on traffic conditions was the most common use of 511, reported by 44 percent of the 398 users of 511, whether current or lapsed. Taken together with the eight percent who reported using 511 for estimating driving times, 52 percent of the mentioned purposes for using 511 were related to driving. Otherwise, 24 percent each reported using 511 for planning trips on public transit and to get information on public transportation. In other words, these 48 percent mentions spoke to 511 use for public transit purposes. Additionally, some 15 percent used 511 to get information on planned transportation disruptions.



Making 511 More Valuable to Users

When asked about what might make 511 a more valuable transportation information source, half of the users either said "Nothing" (24%) or provided no opinion (24%). The remaining comments were quite diffused, with some 38 percent speaking to various improvements to the information provided by 511, such as having a broader range of information or services (7%), more up-to-date or accurate information (7%), better transit or trip planning information (6%) and directions and maps (5%). Otherwise, 13 percent suggested improvements to the technical capability or usability, such as better voice recognition (4%) and user-friendliness (4%).



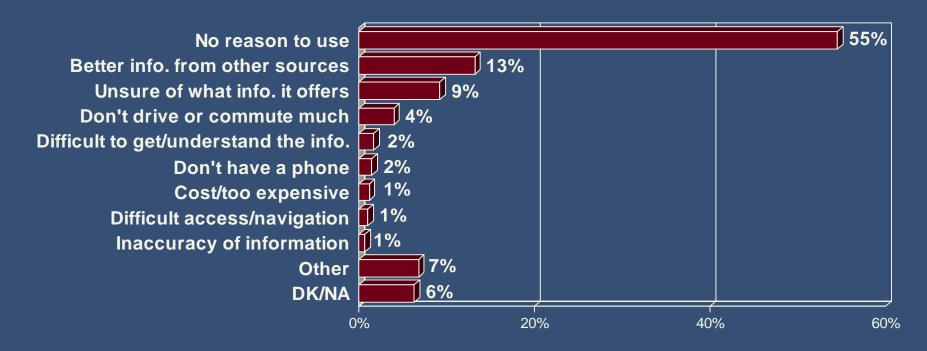


Aware Non-Users of 511

Reasons for Not Using 511

GODBE RESEARCH Gain Insight

The 459 respondents who were aware of 511 but have not used it were asked about the reasons for non-usage. As shown in the following chart, "No reason to use" emerged as the top response by a wide margin, cited by 55 percent. Some 13 percent reported using other information sources they found to be better than 511, and another 9 percent was not sure about what information 511 offers. There is potential for converting these 22 percent into users by making them more aware of the information provided by 511, and by highlighting the most attractive features of 511 (see earlier marketing tagline under the discussion of why 511 was considered a better information source than others).



Reasons for not Using 511 Difference in Subgroups

GODBE RESEARCH Gain Insight

Proportionally more Caucasian, Hispanic and African-American residents in the survey stated that they had no reason to use 511, when compared to their Asian counterparts. Meanwhile, a higher percentage of the respondents with some college-level education reported that they had no reason to use 511, when compared to the graduate degree holders. In addition, those in the income group of \$100,000 to \$149,999 stated that they had no reason to use 511, when compared to the respondent group with the highest annual household income. Similarly, more of the respondents who reported driving alone for trips not related to work or school believed that they had no reason to use 511, when compared to those who used "Other" transportation modes.

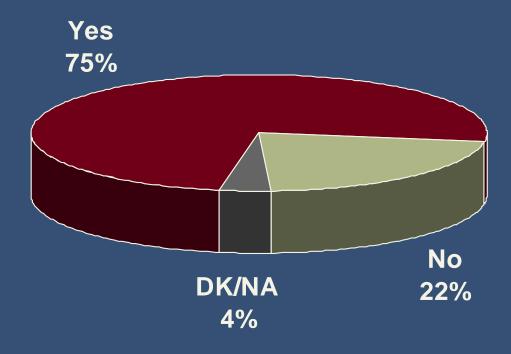
	Ethnicity			Level of Education					
	Cauc- asian	Hisp- anic	Asian	African- American	Other	High School or less	Tech. or Some College	College Graduate	Graduate Degree
No reason to use	59.2%	64.0%	32.9%	66.7%	55.6%	47.0%	66.9%	55.4%	47.6%

	Annual Household Income			Transp		d for trips not r or school	elated	
	Under \$50,000	\$50,000 to \$99,999	\$100,000 to \$149,999	\$150,000 or more	Drive Alone	Public Trans- portation	Carpool or Vanpool	Other
No reason to use	55.3%	53.2%	60.6%	37.9%	58.5%	57.4%	63.5%	40.8%

Awareness of 511 Being Free

GODBE RESEARCH
Gain Insight

Three-quarters of the 463 residents who reported having heard of 511, but have not used it, knew that the service is free, whereas 22 percent thought that it was a paid service. The latter points to an opportunity for educating every one in five aware non-users that 511 is a free service, which may encourage them to use 511 in the future.



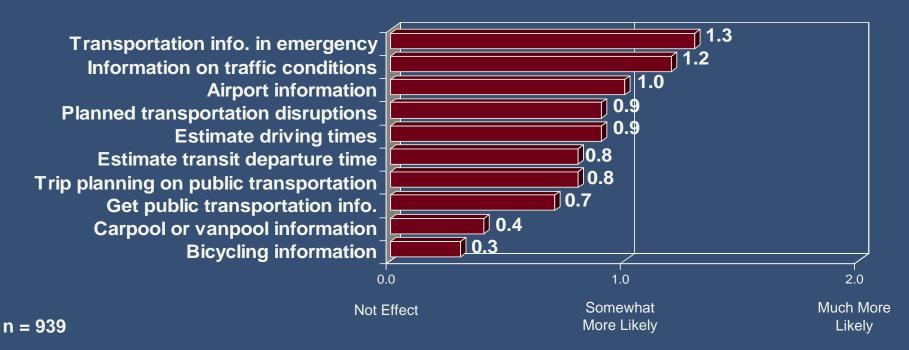


Non-Users of 511

Features Encouraging 511 Use

GODBE RESEARCH
Gain Insight

The next section in the survey identified the features that might encourage future 511 use among the unaware non-users. First, the 939 respondents were asked their likelihood of using 511 upon hearing different service features. Overall, information on transportation in the event of an emergency had the highest impact on making the respondents more likely to use 511, followed closely by information on traffic conditions. More specifically, over 70 percent reported being at least somewhat more likely to use 511 after knowing these features. In the next tier were such items as airport information, planned transportation disruptions and estimating driving times, which made 60 to 65 percent at least somewhat more likely to use 511. Conversely, information on carpool, vanpool and bicycling had close to no effect on at least 70 percent of the 939 unaware non-users.



Note: The above rating questions have been abbreviated for charting purposes. For the exact wording, please see Appendix D. The responses were recoded to calculate mean scores: "Much More Likely" = +2, "Somewhat More Likely" = +1, "No Effect" = 0.

Benefits Encouraging 511 Use

GODBE RESEARCH
Gain Insight

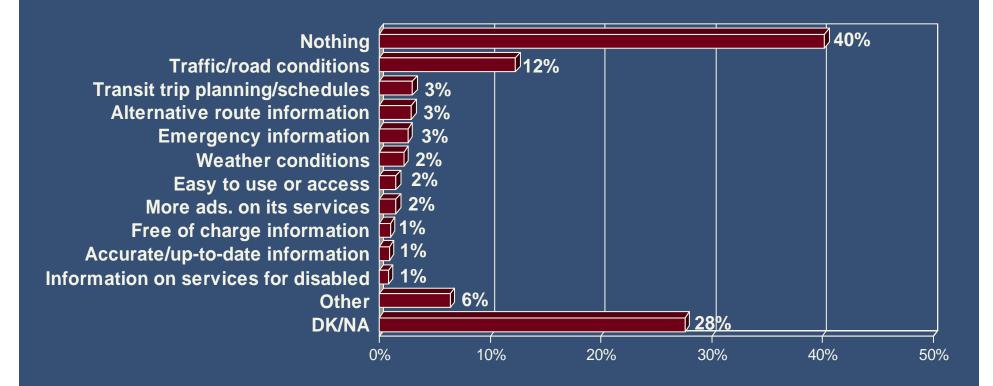
Next, the 939 unaware respondents were presented with different benefits of 511, and were asked to indicate their likelihood of using the service after hearing each benefit. Overall, each of the nine tested messages made the average Bay Area resident at least somewhat more likely to use 511. Out of these, the most influential benefit was that 511 helps one avoid traffic incidents. About three-quarters of these unaware non-users were at least somewhat more likely to use 511 upon hearing this benefit. In the second tier were such benefits as 511 helping users get to their destination faster or on time, and that it helps one avoid recurring congestion, all of which made at least two-thirds of the unaware non-users more likely to use the service. Taken collectively, these results suggest a potential tagline like, "Helps you avoid delays and gets you there faster and on-time."



Note: The above rating questions have been abbreviated for charting purposes. For the exact wording, please see Appendix D. The responses were recoded to calculate mean scores: "Much More Likely" = +2, "Somewhat More Likely" = +1, "No Effect" = 0.

Making 511 Valuable to Non-Users

Next, the unaware respondents were asked to indicate the features that would make 511 a valuable information source to them. In response to this, seven out of every ten respondents could not think of anything (40%) or gave no response (28%). Otherwise, some 12 percent reiterated that information on traffic and road conditions would make 511 more valuable to them. Fewer than five percent cited such items as transit trip planning or schedules, alternative route information and emergency information.

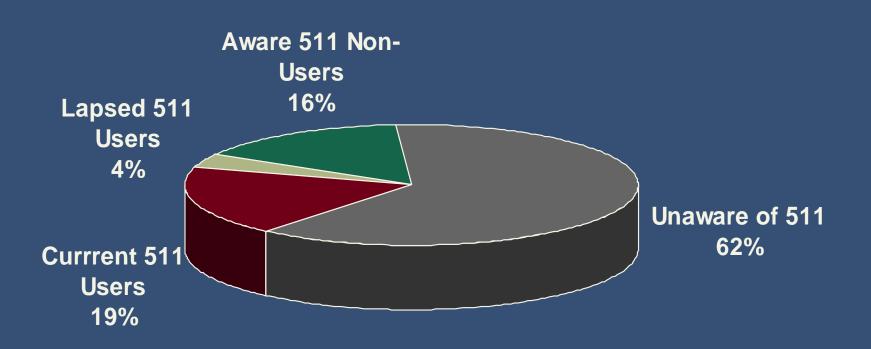




511 Awareness and Usage Profile

Awareness and Usage of 511

Based on the responses to the various 511 awareness and usage questions, the respondents were classified into the following four groups. About 19 percent of the respondents were current users of 511, while only 4 percent had used it at some point in the past, but not in the 12 months preceding the survey (lapsed users). Some 16 percent of the respondents were aware of 511, but had never used the service. The remaining 62 percent were not aware of 511 or the types of information that it offers.



- Current 511 users are estimated to be about 19 percent of Bay Area residents:
 - Most drive alone, with 56 percent for commuting and 48 percent for noncommuting purposes; 24 percent commute using public transit, and 30 percent for non-commuting purposes
 - Frequently use Highway 101 (38%), "other" than major highways (23%),
 I-280 (20%), I-880 (20%) and/or I-80 (18%)
 - While most commute for under 10 miles (41%), significantly more current
 511 users commute 30 miles or longer (15%)
 - Disproportionately high representation from Alameda (29%), San Francisco (16%) and San Mateo (14%) counties
 - Male (53%)
 - Working ages: 30 to 44 (39%); 45 to 59 (28%); 18 to 29 (25%)
 - College graduate or above (64%)
 - Annual gross household income of \$50,000 or higher (69%)

- Those who are aware of, but do not use, 511 are estimated to be roughly 16 percent of Bay Area residents:
 - Most drive alone, with 65 percent for commuting and 59 percent for non-commuting purposes; 20 percent commute using public transit, and 10 percent for non-commuting purposes
 - Frequently use "other" than major highways (35%), Highway 101 (28%),
 I-280 (24%) and/or I-80 (20%)
 - Commute for under 10 miles (43%); 10 to less than 30 miles (24%)
 - Disproportionately high representation from Contra Costa County (19%)
 - Female (52%)
 - Older adults: 30 to 44 (36%); 45 to 59 (33%); 60 and older (20%)
 - College graduate or above (68%)
 - More with annual household income of \$100,000 or more (42%)

Profile of Residents Unaware of 511



- ➤ Those who have not heard of 511, or who are unsure of the information it offers, are estimated to comprise about 62 percent of the Bay Area population:
 - Most drive alone, with 69 percent for commuting and 58 percent for noncommuting purposes; 14 percent commute using public transit, and 17 percent for non-commuting purposes
 - Frequently use Highway 101 (34%), "other" than major highways (25%),
 I-280 (20%) and/or I-80 (17%)
 - Commute shorter distances than the current users and aware non-users: under 10 miles (46%); 10 to less than 30 miles (13%)
 - Disproportionately high representation from Santa Clara County (29%)
 - Female (52%)
 - Older adults: 45 to 59 (28%); 60 and older (27%); 30 to 44 (26%)
 - Disproportionately high representation of and Hispanic (21%)
 - More with high school education or less (25%)
 - More with annual household income of under \$50,000 (28%)

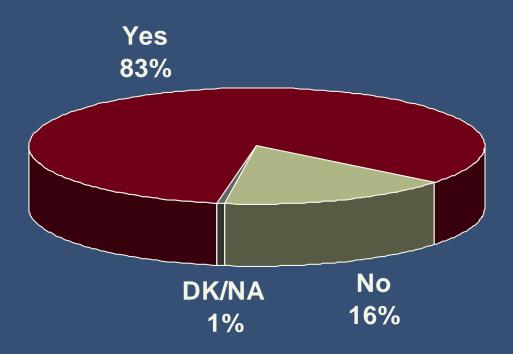


Changeable Message Signs

Awareness of Changeable Message Signs

GODBE RESEARCH
Gain Insight

The next section in the survey focused on gauging the awareness and usefulness of Changeable Message Signs (CMS) on Bay Area highways that provide travel times to specific destinations. As shown in the following chart, 83 percent reported having noticed CMS, whereas 16 percent had not noticed them.



Awareness of Changeable Message Signs Resident Profile I

GODBE RESEARCH
Gain Insight

Among those who reported having seen CMS, there are higher representations of Bay Area residents ages 30 to 59 and proportionately more Caucasians. Conversely, the CMS-unaware segment was more female, higher percentages of those between 18 and 29 years of age or 60 years and older, and more Asians.

		Awareness of Change	able Message Signs
		Yes	No
Gender	Male	51.0%	42.4%
Gender	Female	49.0%	57.6%
	18 to 29	17.3%	27.2%
Ago	30 to 44	32.1%	23.0%
Age	45 to 59	29.7%	21.7%
	60 and older	20.9%	28.0%
	Caucasian	52.2%	40.1%
	Hispanic	18.3%	21.5%
Ethnicity	Asian	21.0%	27.6%
	African-American	6.0%	7.1%
	Other	2.4%	3.7%

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

Awareness of Changeable Message Signs Resident Profile II

GODBE RESEARCH Gain Insight

In terms of education and income levels, the CMS-aware group included more respondents with college and graduate degrees, and was more highly represented by those with annual household income of \$100,000 or more. Conversely, those who were unaware of these signs were more likely to have completed less than some college or technical school, and with annual household income of less than \$50,000.

		Awareness of Changeable Message Signs		
		Yes	No	
	High School or less	18.2%	38.4%	
Loyal of Education	Technical or Some College	17.7%	23.2%	
Level of Education	College Graduate	34.1%	27.2%	
	Graduate Degree	29.9%	11.1%	
	Under \$50,000	20.9%	34.8%	
Annual Household Income	\$50,000 to \$99,999	28.3%	33.0%	
	\$100,000 to \$149,999	18.5%	8.7%	
	\$150,000 or more	17.9%	5.6%	

Awareness of Changeable Message Signs Resident Profile III

GODBE RESEARCH Gain Insight

Not surprisingly, the CMS-aware segment showed a higher percentage of respondents who reported driving alone, whether for commuting purposes or for trips not related to work or school. Meanwhile, among those who have not noticed CMS, there was a higher percentage of public transit users, especially for commuting purposes. These results hold intuitive appeal.

		Awareness of Message	
		Yes	No
	Drive alone	66.0%	58.9%
Transportation used to go to work or school	Public transportation	16.4%	22.8%
	Carpool or Vanpool	6.3%	5.2%
	Other	11.2%	13.1%
	Drive alone	58.3%	48.4%
Transportation used for trips not related to work or school	Public transportation	17.7%	21.1%
	Carpool or Vanpool	9.0%	9.8%
	Other	15.0%	20.7%

Awareness of Changeable Message Signs Resident Profile IV

GODBE RESEARCH
Gain Insight

Among the CMS-aware group, county representation was fairly even from each of the nine counties. Meanwhile, the CMS-unaware group showed proportionately more Solano and Sonoma County residents and fewer Marin County. In terms of highway use, higher proportions of the CMS-aware residents were frequent users of I-280, I-880 and I-580, when compared to the unaware group. Highway 101 users were equally likely to be in either group. Hence, promotion of CMS should be focused on the other three major highways.

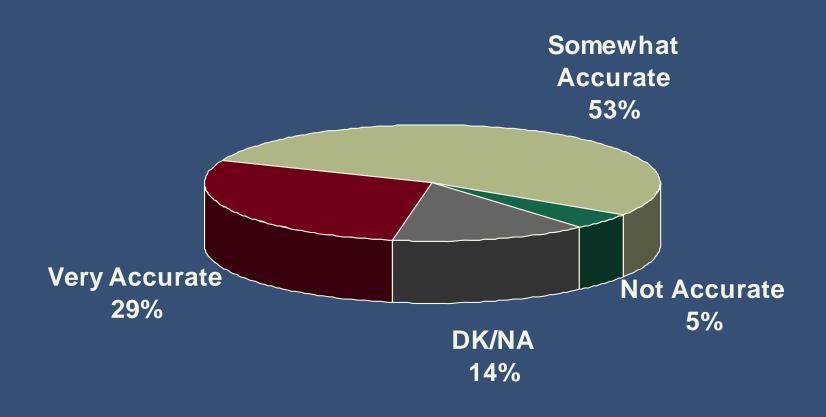
		Awareness of Changeable Message Signs		
		Yes	No	
	Alameda	11.3%	10.2%	
	Contra Costa	11.3%	10.1%	
	Marin	12.2%	5.8%	
	Napa	11.1%	11.7%	
County of Residence	San Francisco	10.9%	11.7%	
11001001100	San Mateo	11.8%	8.1%	
	Santa Clara	10.8%	12.2%	
	Solano	10.2%	14.6%	
	Sonoma	10.3%	15.6%	

		Awareness of Changeable Message Signs		
		Yes No		
	I-80	17.8%	17.2%	
	I-280	21.3%	13.0%	
Frequently	I-880	15.0%	8.7%	
Used	I-580	12.7%	5.7%	
Highways or Freeways	I-680	11.8%	8.5%	
Of Freeways	Highway 101	34.2%	29.9%	
	Other	26.8%	24.3%	
	No highway travel	4.5%	7.7%	

Accuracy of Changeable Message Signs

GODBE RESEARCH
Gain Insight

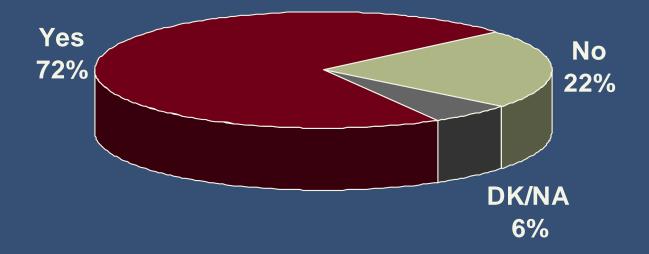
Of the respondents who had noticed the changeable message signs, 82 percent found the information on them to be "Very Accurate" (29%) or "Somewhat Accurate" (53%). On the other hand, only five percent of the respondents thought that the message signs did not provide accurate information, while 14 percent did not render an opinion.



Usefulness of Changeable Message Signs

GODBE RESEARCH Gain Insight

About 72 percent of the respondents who reported not having noticed the changeable message signs on the highways thought that such a service would be useful, whereas 22 percent thought that this service would not be useful to them.



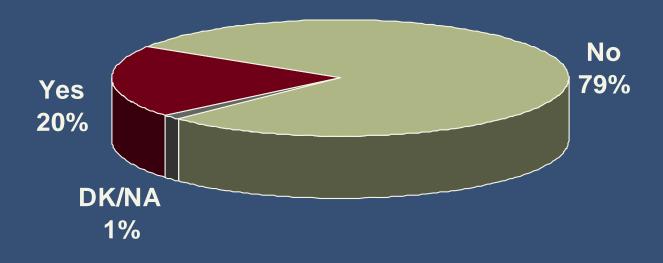


Translink®

Awareness of Translink®

GODBE RESEARCH
Gain Insight

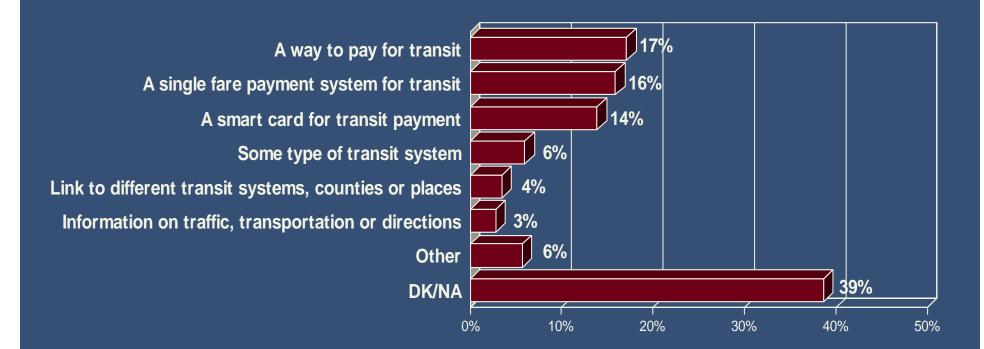
With respect to Translink®, an overwhelming majority of the respondents had never heard of it (79%). Conversely, only one out of every five respondents had heard of Translink®.



Description of Translink®

GODBE RESEARCH Gain Insight

Next, the respondents who reported having heard of Translink® were asked to describe what it was. As shown in the chart, 39 percent could not describe it. About 13 percent of the respondents described it incorrectly as some type of transit system (6%), link to different transit systems, counties or places (4%) or as information on traffic, transportation or directions (3%). On the other hand, about 47 percent described it correctly as a way to pay for transit (17%), as a single fare payment for transit (16%) or as a smart card for transit payment (14%). This translates to about 9 percent of the overall survey participants who had correct knowledge of Translink®.



Awareness of Translink® Resident Profile I

GODBE RESEARCH Gain Insight

Age and ethnic proportions were roughly equal between the segment who has correct knowledge of Translink® and the unaware group. The only exceptions are that the unaware group was represented by more residents 60 and older, and fewer African-Americans. Otherwise, the Translink® unaware group is characterized by almost 60 percent of residents between 30 to 59 years of age, as well as 50 percent Caucasian, 20 percent Hispanic and 22 percent Asian. To boost awareness among the Hispanic residents especially, having promotional materials in Spanish would be important.

		Awareness of Translink®		
		Yes	No	
	18 to 29	24.8%	18.8%	
A 90	30 to 44	32.2%	30.6%	
Age	45 to 59	27.6%	28.3%	
	60 and older	15.4%	22.4%	
	Caucasian	50.0%	49.9%	
	Hispanic	14.6%	19.6%	
Ethnicity	Asian	22.8%	22.0%	
	African-American	10.5%	5.7%	
	Other	2.0%	2.8%	

Awareness of Translink® Resident Profile II

GODBE RESEARCH Gain Insight

Not surprisingly, the group of respondents with correct knowledge of Translink® was more highly represented by public transportation users, both for commuting and non-commuting purposes. On the contrary, proportionally more of those who were unaware of this service reported driving alone mostly.

		Awareness of Translink®	
		Yes	No
Transportation used to go to work or school	Drive alone	30.7%	68.3%
	Public transportation	43.5%	14.9%
	Carpool or Vanpool	4.1%	6.4%
	Other	21.6%	10.5%
Transportation used for trips not related to work or school	Drive alone	44.0%	57.8%
	Public transportation	35.2%	16.7%
	Carpool or Vanpool	9.0%	9.1%
	Other	11.8%	16.5%

Awareness of Translink® Resident Profile III

GODBE RESEARCH Gain Insight

Substantially higher representations of Alameda, Contra Costa, Marin and San Francisco County residents were found in the group with correct knowledge of Translink®, whereas proportionately more residents in Napa, San Mateo, Santa Clara and Sonoma counties had never heard of Translink® or were not sure of what the service offered. Depending on when Translink® might become available in these four counties, future promotional efforts should especially focus on the residents in these areas.

		Awareness of Translink®	
		Yes	No
County of Residence	Alameda	21.3%	10.3%
	Contra Costa	15.9%	10.6%
	Marin	16.3%	10.3%
	Napa	3.6%	11.8%
	San Francisco	23.4%	10.2%
	San Mateo	4.4%	11.8%
	Santa Clara	1.4%	12.3%
	Solano	9.6%	11.2%
	Sonoma	4.0%	11.8%

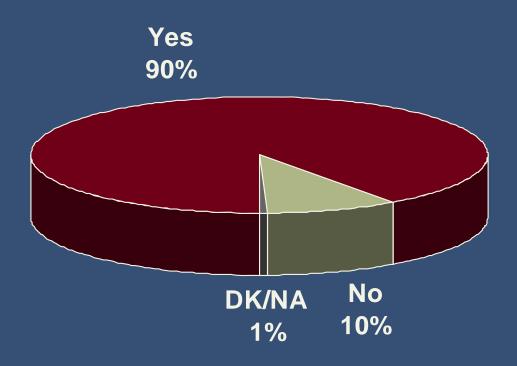


FasTrak

Awareness of FasTrak

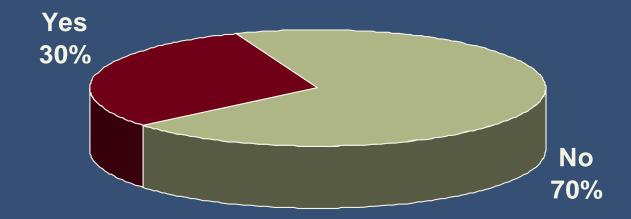
GODBE RESEARCH
Gain Insight

The next section in the survey focused on gaining insights on the awareness and usage of FasTrak. Firstly, an overwhelming majority of the respondents in the survey reported having heard of FasTrak (90%), whereas 10 percent were not aware of it.



Usage of FasTrak

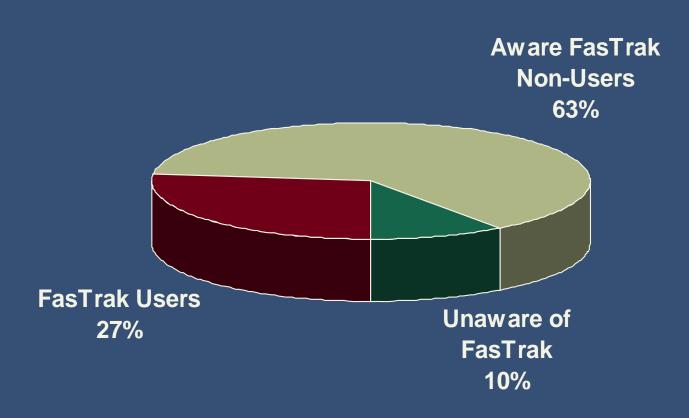
About 70 percent of the aware respondents did not have a FasTrak account, and only 30 percent reported having one.



FasTrak Awareness and Usage

GODBE RESEARCH
Gain Insight

The following chart illustrates the overall awareness and usage of FasTrak. About 27 percent of the respondents in the survey used FasTrak, whereas 63 percent did not use it in spite of having heard of FasTrak. Another 10 percent of the respondents have not heard of FasTrak and, as such, have not used it.



FasTrak Awareness and Usage Resident Profile I

GODBE RESEARCH
Gain Insight

Current FasTrak users are equally likely to be male or female, mostly between the ages of 30 to 59, and predominantly Caucasian. FasTrak-aware respondents, who do not use FasTrak, were found to be mostly between the ages of 18 and 44, or 60 years and older, and of Caucasian descent. Meanwhile, the FasTrak-unaware group has proportionately more women, 18- to 29-year-olds, and Hispanic residents.

		FasTrak Users	Aware FasTrak Non-Users	Unaware FasTrak Non-Users
Candar	Male	49.0%	50.9%	41.3%
Gender	Female	51.0%	49.1%	58.7%
	18 to 29	12.6%	19.8%	32.1%
Ago	30 to 44	33.8%	31.1%	18.7%
Age	45 to 59	35.8%	25.0%	29.1%
	60 and older	17.7%	24.1%	20.2%
	Caucasian	57.8%	49.9%	31.2%
	Hispanic	11.2%	18.6%	41.4%
Ethnicity	Asian	24.0%	21.1%	22.4%
	African-American	4.2%	7.7%	2.5%
	Other	2.8%	2.7%	2.5%

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

FasTrak Awareness and Usage Resident Profile II

GODBE RESEARCH
Gain Insight

Education and income levels are lower as we move across the FasTrak awareness and usage continuum. Specifically, there were more college and graduate degree holders, as well as those with annual household income of \$100,000 or more, among the FasTrak users. Among the aware non-user group, higher representation of those with high school or less education was found, along with more residents with under \$50,000 in annual household income. These patterns are more pronounced when looking at the FasTrak-unaware group, with 43 percent having high school or less education and 37 percent under \$50,000 in annual household income.

		FasTrak Users	Aware FasTrak Non-Users	Unaware FasTrak Non-Users
	High School or less	9.2%	23.9%	43.3%
Level of	Technical or Some College	18.2%	18.7%	18.8%
Education	College Graduate	38.2%	33.1%	17.3%
	Graduate Degree	34.4%	24.3%	20.6%
	Under \$50,000	7.6%	28.1%	36.9%
Annual Household	\$50,000 to \$99,999	31.7%	28.8%	22.3%
Income	\$100,000 to \$149,999	23.6%	15.2%	8.2%
	\$150,000 or more	21.1%	13.9%	13.1%

FasTrak Awareness and Usage Resident Profile II

GODBE RESEARCH
Gain Insight

Travel modes were similar across the different groups, with majority of the residents being commuters driving alone. In terms of highway usage, there were some differences observed. Specifically, among the FasTrak users, there were proportionately more users of I-80, I-880, I-580 and I-680. Meanwhile, I-680 users were more highly represented in the aware non-user group.

		FasTrak Users	Aware FasTrak Non-Users	Unaware FasTrak Non-Users
	Drive alone	65.7%	64.8%	62.9%
Transportation	Public transportation	16.0%	17.9%	18.9%
used to go to work or school	Carpool or Vanpool	6.8%	6.6%	1.6%
	Other	11.5%	10.8%	16.6%
	I-80	25.7%	15.7%	8.9%
	I-280	17.1%	20.8%	23.4%
	I-880	18.4%	12.7%	8.7%
Frequently Used Highways or	I-580	17.8%	10.0%	3.9%
Freeways	I-680	12.6%	11.5%	5.4%
	Highway 101	37.1%	32.2%	31.9%
	Other	24.0%	27.5%	23.3%
	No travel on highway or freeway	2.5%	6.1%	5.1%

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

FasTrak Awareness and Usage Resident Profile II

GODBE RESEARCH Gain Insight

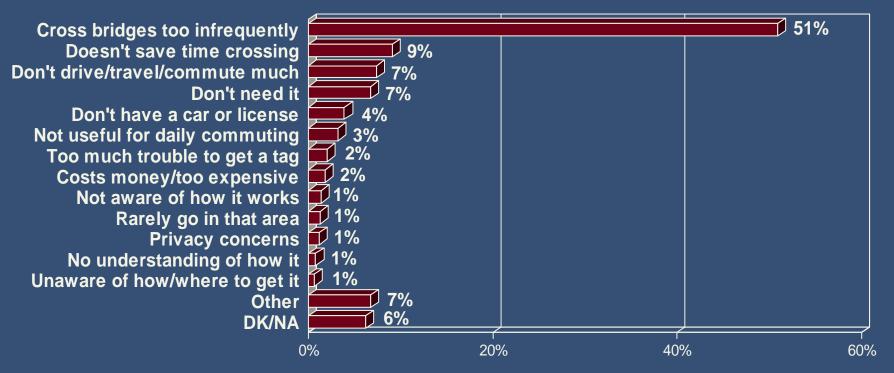
Overall, FasTrak awareness and usage varied by county residence. Specifically, more of the users come from the counties of Alameda, Contra Costa, Marin, and San Francisco, while the non-users, whether aware of FasTrak or not, had higher representation from the counties of Napa, Santa Clara and Sonoma. It is also notable that the percentages of aware non-users in Alameda and Contra Costa were comparable to those among the users.

		FasTrak Users	Aware FasTrak Non-Users	Unaware FasTrak Non-Users
	Alameda	13.6%	11.0%	4.2%
	Contra Costa	11.6%	12.3%	2.3%
	Marin	21.0%	6.8%	6.9%
	Napa	6.8%	12.8%	14.0%
County of Residence	San Francisco	14.0%	10.7%	4.7%
	San Mateo	13.4%	10.1%	10.6%
	Santa Clara	1.9%	13.4%	25.3%
	Solano	11.0%	10.7%	13.9%
	Sonoma	6.7%	12.2%	17.9%

Reasons for Not Using FasTrak

GODBE RESEARCH
Gain Insight

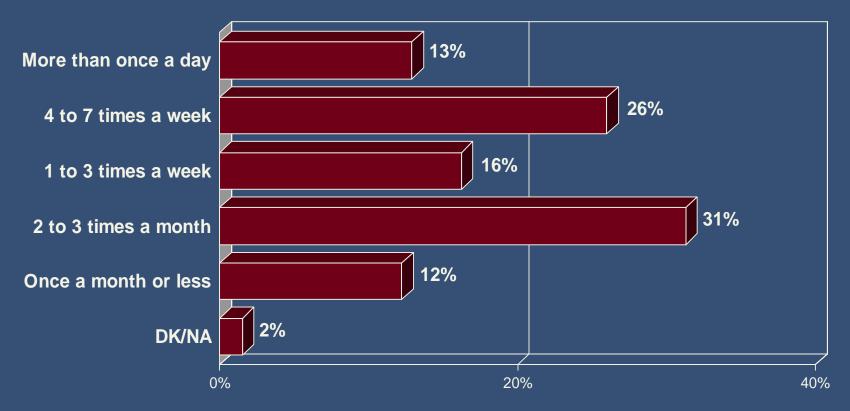
The 1129 respondents who reported not having a FasTrak account were asked the reasons for not having one. By a wide margin, infrequent crossing of bridges emerged as the top reason mentioned by about half the respondents. This, along with the reasons, like "Don't drive/travel/commute much," "Don't need it," "Don't have a car or license" and "Not useful for daily commuting," add up to 72 percent, who basically represent the residents who do not need FasTrak or are unlikely to use it regardless of what messages they get about its benefits. Meanwhile, some 9 percent did not use FasTrak because they believed that it does not save any time crossing bridges.



Frequency of Using FasTrak

GODBE RESEARCH
Gain Insight

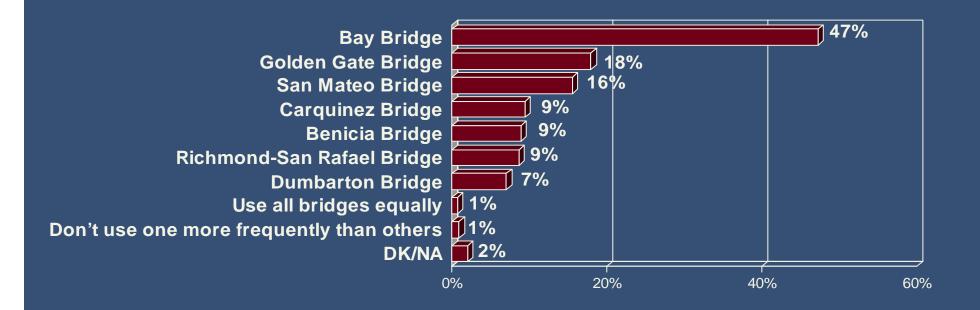
The respondents who had a FasTrak account were asked how many times per month they used FasTrak. As shown in the following chart, four out of every ten respondents used it for daily commuting, with a usage frequency of "More than once a day" (13%) or "4 to 7 times a week" (26%). As opposed to this, 59 percent used it at a lower frequency like 1 to 3 times a week (16%), 2 to 3 times a month (31%), and once a month or less (12%).



Frequently Crossed Bridges

GODBE RESEARCH Gain Insight

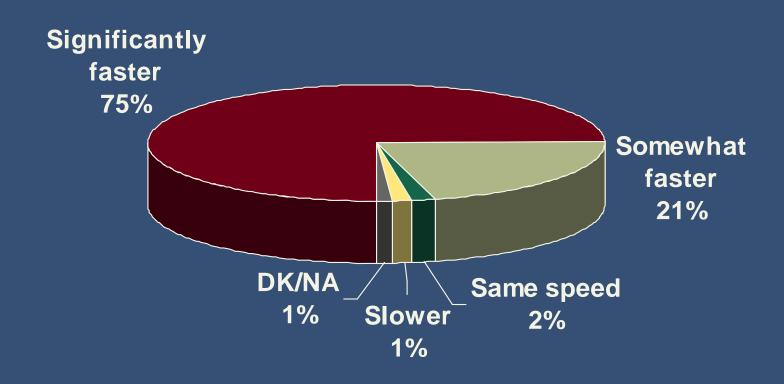
Close to half of the FasTrak account holders crossed the Bay Bridge most frequently using FasTrak lanes. The Golden Gate and San Mateo bridges were the next most frequently crossed bridges by 18 and 16 percent of the respondents, respectively. Otherwise, fewer than ten percent of the FasTrak users reported crossing the other bridges in the Bay Area using FasTrak lanes.



Speed of Bridge Crossing Using FasTrak

GODBE RESEARCH
Gain Insight

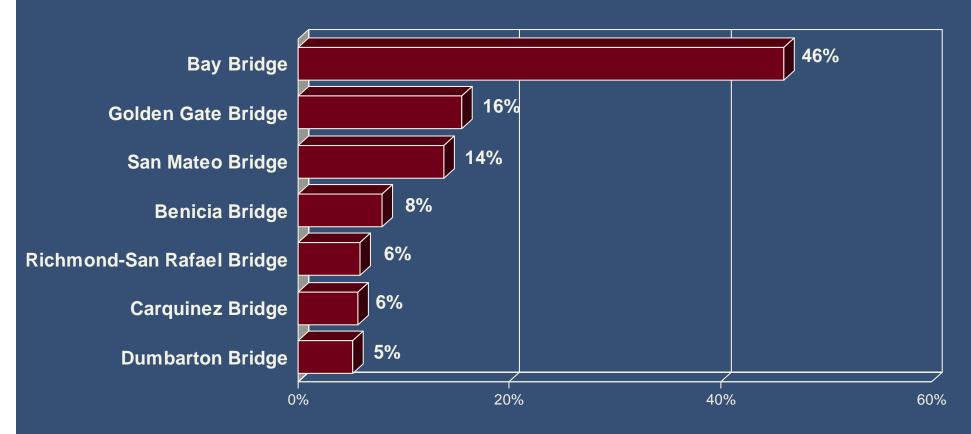
When asked about the speed of crossing bridges with FasTrak, an overwhelming majority of the respondents (96%) reported it was at least somewhat faster than paying cash (75% "Significantly faster" and 21% "Somewhat faster"). About two percent thought that the speed of crossing bridges using FasTrak was comparable to paying cash, whereas only one percent thought that it was slower than paying cash. These findings could be valuable messaging to convince current non-users to adopt FasTrak.



Rated Bridge

GODBE RESEARCH
Gain Insight

When rating the speed for crossing bridges using FasTrak, 46 percent referred to crossing the Bay Bridge, 16 percent referred to the Golden Gate Bridge, and 14 percent referred to the San Mateo Bridge. All other bridges were referred to by fewer than 10 percent of the respondents.



Speed of Crossing Bridges By the Most Frequently Crossed Bridge

GODBE RESEARCH
Gain Insight

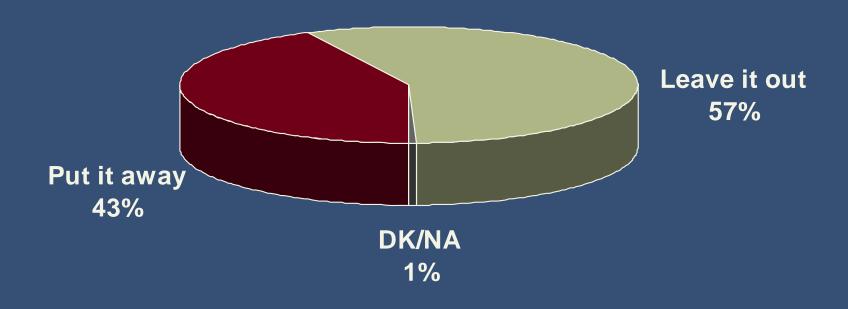
Overall, compared to the Bay Bridge users, proportionally more of the San Mateo Bridge users thought that crossing the bridge using FasTrak was slower than paying cash. At the same time, fewer San Mateo Bridge users, compared to the Dumbarton and Benicia Bridge users, reported that FasTrak helped them to cross the bridge significantly faster than paying cash.

		Most Frequently Crossed Bridges								
	Bay Bridge	Golden Gate Bridge	Richmond- San Rafael Bridge	San Mateo Bridge	Dumbarton Bridge	Carquinez Bridge	Benicia Bridge			
Total	225	76	29	68	26	28	39			
Slower than paying cash	0.0%	0.4%	0.0%	9.3%	0.0%	0.0%	0.7%			
Same speed as paying cash	0.7%	4.2%	4.4%	2.7%	0.0%	4.6%	0.0%			
Somewhat faster than paying cash	23.0%	19.7%	19.3%	32.6%	7.3%	10.7%	8.0%			
Significantly faster than paying cash	74.4%	75.1%	76.2%	55.4%	92.7%	84.7%	91.3%			
DK/NA	1.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			

FasTrak Transponder

GODBE RESEARCH
Gain Insight

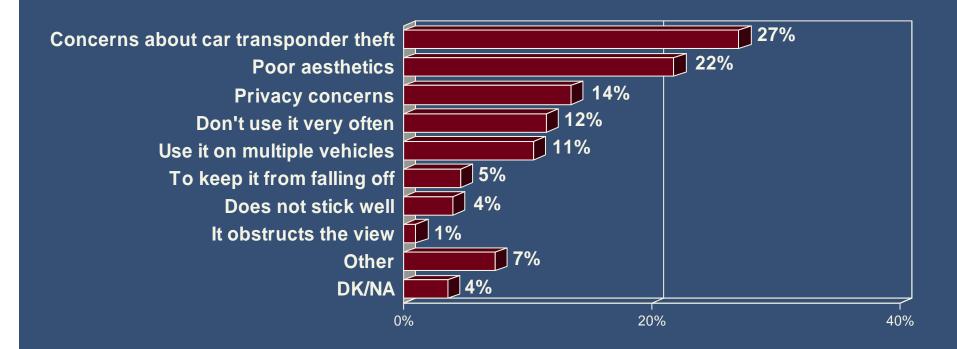
About 57 percent of the 490 FasTrak users reported leaving their transponders out, whereas 43 percent reported putting theirs away.



Reasons for Putting Transponder Away

GODBE RESEARCH
Gain Insight

About 27 percent of those who reported putting their transponders away were concerned about car transponder theft, whereas 22 percent put theirs away because of poor aesthetics. Another 14 percent had privacy concerns. Few of the other less mentioned reasons included the transponder being used infrequently (12%) or on multiple vehicles (11%).



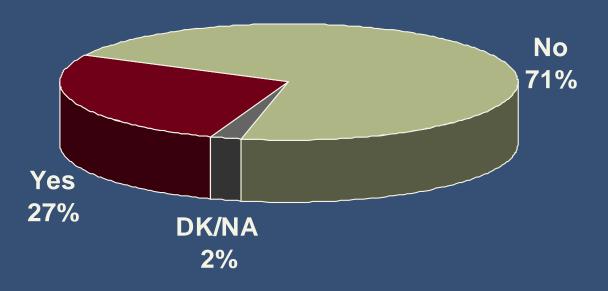


Freeway Service Patrol

Awareness of Freeway Service Patrol

GODBE RESEARCH
Gain Insight

The next two questions in the survey gauged the awareness and usefulness of the Freeway Service Patrol. As shown in the following chart, only 27 percent of the respondents were aware of the Freeway Service Patrol, whereas 71 percent were not aware of the service.



Awareness of Freeway Service Patrol Resident Profile I

GODBE RESEARCH Gain Insight

Overall, the segment who has heard of the Freeway Service Patrol (FSP) service had more men and those with annual household income of \$50,000 to \$99,999. On the contrary, the FSP-unaware group had more women and those between 18 and 29 years of age.

		Awareness of Freeway Service Patrol			
		Yes	No		
Gender	Male	53.8%	48.0%		
Gender	Female	46.2%	52.0%		
	18 to 29	13.4%	21.0%		
Ago	30 to 44	34.1%	29.9%		
Age	45 to 59	31.0%	27.1%		
	60 and older	21.5%	22.1%		
	Under \$50,000	21.5%	23.0%		
Annual Household	\$50,000 to \$99,999	33.2%	28.1%		
Income	\$100,000 to \$149,999	18.4%	16.6%		
	\$150,000 or more	15.3%	16.2%		

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

Awareness of Freeway Service Patrol Resident Profile II

GODBE RESEARCH Gain Insight

Aside from the prominence of lone drivers, among those who reported being aware of FSP were higher users of "Other" modes of transportation for commuting purposes and of public transportation for trips not related to work or school.

			of Freeway e Patrol
		Yes	No
	Drive alone	61.6%	66.3%
Transportation used to go	Public transportation	17.0%	17.8%
to work or school	Carpool or Vanpool	7.3%	5.8%
	Other	14.1%	10.2%
	Drive alone	56.2%	56.7%
Transportation used for trips not related to work or school	Public transportation	23.0%	16.3%
	Carpool or Vanpool	7.1%	9.7%
	Other	13.7%	17.2%

Awareness of Freeway Service Patrol Resident Profile III

GODBE RESEARCH Gain Insight

Last, but not least, the FSP-aware group showed higher representation of residents from Alameda and Contra Costa counties, and of those who reported frequently driving on I-80 and I-880. On the contrary, the FSP-unaware respondents were more likely to reside in Napa, San Francisco and Sonoma counties.

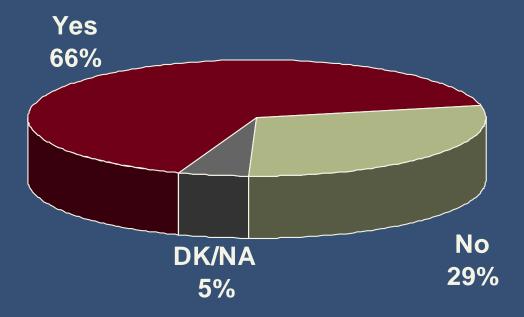
		Awareness of Freeway Service Patrol		
		Yes	No	
	Alameda	16.0%	9.3%	
	Contra Costa	14.8%	10.0%	
	Marin	11.3%	11.2%	
	Napa	8.6%	12.1%	
County of Residence	San Francisco	8.1%	12.1%	
110010101100	San Mateo	12.2%	10.8%	
	Santa Clara	10.1%	10.9%	
	Solano	11.1%	11.3%	
	Sonoma	7.7%	12.1%	

		Awareness Service	
		Yes	No
	I-80	22.3%	16.5%
	I-280	16.8%	20.7%
Fraguently	I-880	17.4%	12.4%
Frequently Used	I-580	12.3%	10.9%
Highways or	I-680	11.0%	11.4%
Freeways	Highway 101	33.2%	33.4%
	Other	25.1%	27.0%
	No highway travel	4.7%	5.3%

Usefulness of Freeway Service Patrol

GODBE RESEARCH
Gain Insight

Of the 1313 respondents who were unaware of the Freeway Service Patrol, two-thirds would find the service to be useful, whereas 29 percent would not find it useful. These results suggest an opportunity to provide more public information about this service.



Usefulness of Freeway Service Patrol Difference in Subgroups I

GODBE RESEARCH
Gain Insight

Higher proportions of the FSP-unaware respondents between 18 and 59 years of age, of Hispanic, Asian or African American descent, and those who mainly drive on I-80, I-880 and I-580 would find the Freeway Service Patrol useful. As opposed to this, those 60 years or older and of Caucasian descent reported that this service would not be useful to them.

	Age				Ethnicity					
	18 to 29	30 to 44	45 to 59	60 and older	Caucasian	Hispanic	Asian	African- American	Other	
Yes	73.9%	72.6%	67.7%	47.7%	59.1%	76.6%	71.9%	75.3%	66.8%	
No	19.5%	25.7%	27.1%	45.0%	37.1%	15.5%	22.4%	21.2%	30.5%	
DK/NA	6.6%	1.7%	5.2%	7.3%	3.8%	8.0%	5.7%	3.5%	2.7%	

		Frequently Used Highways or Freeways											
	I-80 I-280 I-880 I-5			I-580	I-680	Highway 101	Other	No highway travel					
Yes	75.1%	70.2%	76.1%	75.8%	70.5%	68.1%	64.3%	52.6%					
No	20.0%	24.7%	19.7%	19.4%	24.9%	27.8%	29.0%	32.9%					
DK/NA	5.0%	5.1%	4.2%	4.8%	4.7%	4.0%	6.7%	14.5%					

Usefulness of Freeway Service Patrol Difference in Subgroups II

GODBE RESEARCH Gain Insight

The Alameda and Marin county residents, unaware of FSP at the time of the survey, would find the service useful, whereas the respondents in Santa Clara and Solano counties stated that the service would not be useful to them.

		County of Residence									
	Alameda	Contra Costa	Marin	Napa	San Francisco	San Mateo	Santa Clara	Solano	Sonoma		
Yes	86.1%	76.3%	88.1%	78.4%	76.4%	83.6%	71.4%	73.9%	77.4%		
No	13.9%	23.4%	11.6%	21.1%	21.4%	15.0%	26.8%	25.9%	22.6%		
DK/NA	0.0%	0.3%	0.4%	0.6%	2.2%	1.4%	1.8%	0.1%	0.0%		

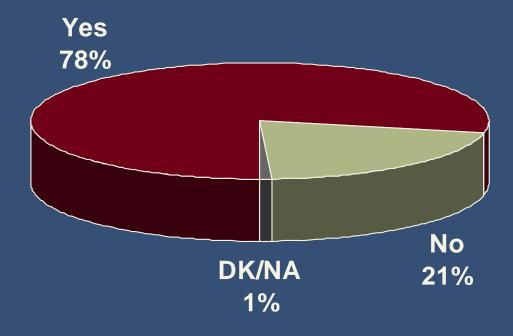


Call Boxes

Awareness of Call Boxes

GODBE RESEARCH Gain Insight

With respect to Call Boxes, 78 percent were aware of this network that provides aid to motorists on Bay Area freeways.



Awareness of Call Boxes Resident Profile I

GODBE RESEARCH Gain Insight

Bay Area residents who reported being aware of the Call Boxes were mainly 45 years or older and of Caucasian descent, whereas the proportions of those unaware were higher among the 18- to 44-year-olds, and among the Hispanics and the Asians.

		Awareness of Call Boxes	
		Yes	No
	18 to 29	17.5%	23.6%
Age	30 to 44	29.0%	37.7%
	45 to 59	30.3%	21.2%
	60 and older	23.2%	17.5%
Ethnicity	Caucasian	56.0%	29.2%
	Hispanic	16.3%	26.9%
	Asian	18.8%	34.4%
	African-American	6.3%	6.2%
	Other	2.5%	3.3%

Awareness of Call Boxes Resident Profile II

GODBE RESEARCH Gain Insight

Similarly, awareness of Call Boxes was higher among those having some college education or a college degree. Conversely, the unaware respondents reported having high school education or less, or having graduate degrees, and with annual household income of less than \$50,000 a year.

		Awareness of Call Boxes	
		Yes	No
Level of Education	High School or less	20.3%	25.3%
	Technical or Some College	19.8%	14.5%
	College Graduate	34.3%	28.2%
	Graduate Degree	25.6%	32.0%
Annual Household Income	Under \$50,000	21.6%	27.7%
	\$50,000 to \$99,999	29.5%	27.4%
	\$100,000 to \$149,999	17.8%	13.6%
	\$150,000 or more	15.6%	17.2%

Awareness of Call Boxes Resident Profile III

GODBE RESEARCH Gain Insight

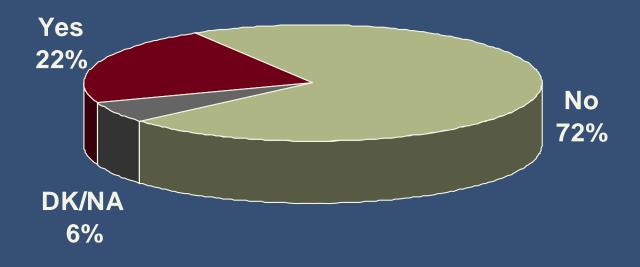
Finally, among those aware of Call Boxes, there was higher representation of Alameda and Marin residents, whereas the unaware group had proportionately more Santa Clara and Solano county residents.

		Awareness of Call Boxes	
		Yes	No
	Alameda	12.1%	7.6%
County of Residence	Contra Costa	10.7%	12.9%
	Marin	12.4%	6.4%
	Napa	11.0%	11.6%
	San Francisco	10.7%	11.8%
	San Mateo	11.8%	8.3%
	Santa Clara	10.0%	14.7%
	Solano	10.4%	14.3%
	Sonoma	10.9%	12.4%

Usefulness of Call Boxes

GODBE RESEARCH
Gain Insight

When asked about the usefulness of Call Boxes, 72 percent of the 391 not currently aware of this service reported that it would not be useful to them, most likely because of the prominence of mobile phones. Otherwise, some 22 percent thought the service would be useful to them.



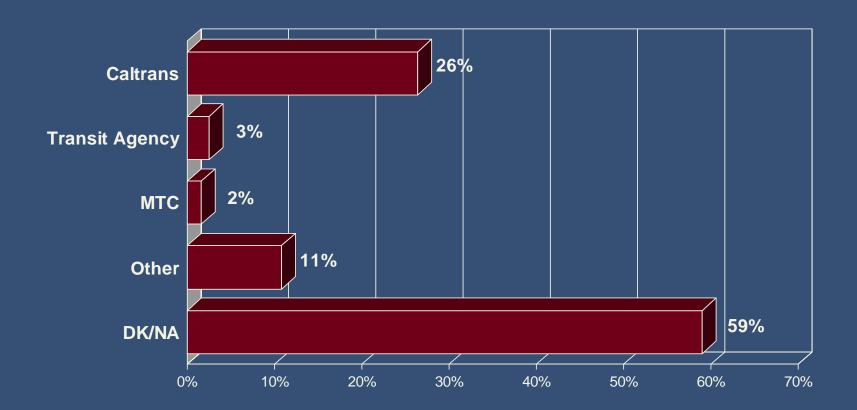


Additional Topics

Awareness of MTC as Service Provider

GODBE RESEARCH Gain Insight

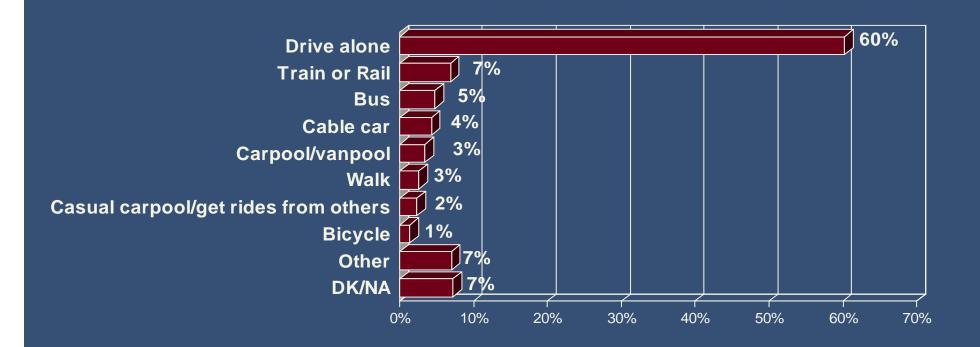
The final substantive question in the survey asked if the respondents were aware of the public agency that provides the services, including Translink®, FasTrak, the Callbox program and 511. Three in five respondents could not answer this question, whereas 26 percent thought that the services were provided by Caltrans. Only two percent correctly identified the agency as MTC. These results point to the need for more public education to increase awareness of MTC among Bay Area residents.



Transportation for Commuting

GODBE RESEARCH
Gain Insight

Six out of every ten respondents in the survey drove alone to work or school, whereas 16 percent used some kind of public transportation including train (7%), bus (5%) or cable car (4%) for commuting. Another five percent used carpool, vanpool or rides from others for commuting.



Transportation for Commuting Difference in Subgroups I

GODBE RESEARCH Gain Insight

Respondents who reported driving alone to go to work or school were mostly Caucasian and college graduates. By contrast, those using public transportation for commuting purposes were more likely to have high school education or less.

		Transportation for Commuting	
		Drive Alone	Public Transportation
	Caucasian	50.1%	38.2%
	Hispanic	20.8%	24.1%
Ethnicity	Asian	21.5%	27.9%
	African-American	5.2%	7.9%
	Other	2.5%	1.9%
	High School or less	18.7%	33.6%
Level of	Technical or Some College	20.5%	14.3%
Education	College Graduate	33.8%	23.5%
	Graduate Degree	27.0%	28.5%

Transportation for Commuting Difference in Subgroups II

GODBE RESEARCH
Gain Insight

Among the commuters driving alone, there were higher representations of those with annual household income of \$50,000 to \$99,999, and of frequent users of I-280 and Highway 101. Conversely, more of those using public transportation for commuting reported an annual household income of under \$50,000 and no travel on highways or freeways.

		Transportation for Commuting	
		Drive Alone	Public Transportation
	Under \$50,000	19.8%	35.5%
Annual Household	\$50,000 to \$99,999	29.6%	18.6%
Income	\$100,000 to \$149,999	17.7%	18.2%
	\$150,000 or more	18.0%	13.9%
	I-80	16.2%	20.6%
	I-280	23.2%	15.2%
	I-880	12.7%	16.3%
Frequently Used	I-580	10.6%	6.6%
Highways or Freeways	I-680	12.0%	9.2%
	Highway 101	36.8%	24.2%
	Other	28.0%	24.7%
	No travel on highway or freeway	3.8%	10.5%

Note: Significant differences at the 95% confidence level between subgroups on any given survey item are denoted by colors: a <u>blue</u> mean score or percentage figure is statistically higher than a <u>red</u> number between comparative groups, e.g., male vs. female, different age groups etc.

Transportation for Commuting Difference in Subgroups III

GODBE RESEARCH Gain Insight

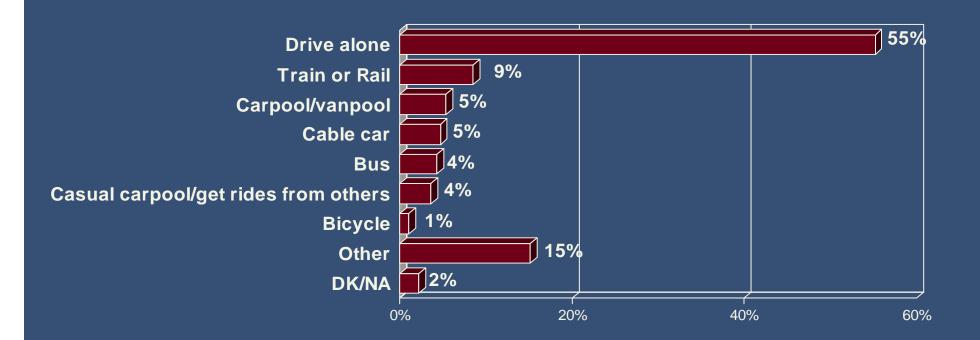
There were higher percentages of Napa, Solano and Sonoma county residents among the commuters driving alone, while those reported using public transition for commuting purposes were more highly represented by Alameda and San Francisco residents.

		Transportation for Commuting	
		Drive Alone	Public Transportation
	Alameda	8.7%	19.9%
	Contra Costa	10.6%	16.3%
	Marin	10.5%	8.0%
	Napa	13.4%	5.0%
County of Residence	San Francisco	7.0%	22.0%
	San Mateo	12.2%	10.2%
	Santa Clara	12.9%	8.5%
	Solano	12.4%	5.2%
	Sonoma	12.2%	4.9%

Transportation for Non-Commuting

GODBE RESEARCH
Gain Insight

With respect to the transportation modes used for non-commuting purposes, 55 percent reported that they drove alone, whereas 18 percent used public transportation (train, bus or cable car) and another 9 percent used a carpool, vanpool or rides from others for trips not related to work or school.



Transportation for Non-Commuting Difference in Subgroups I

GODBE RESEARCH Gain Insight

Those driving alone for trips not related to work or school were mostly Caucasians, whereas those who typically took public transportation for non-commuting purposes were proportionately more likely to be between 18 and 29 years of age, and of Hispanic descent.

		Transportation for Non-commuting	
		Drive Alone	Public Transportation
	18 to 29	15.9%	30.2%
Ago	30 to 44	32.0%	26.7%
Age	45 to 59	30.6%	22.5%
	60 and older	21.5%	20.5%
Caucasian		52.1%	40.7%
	Hispanic	16.9%	24.5%
Ethnicity	Asian	22.0%	26.4%
	African-American	6.6%	6.4%
	Other	2.3%	2.0%

Transportation for Non-Commuting Difference in Subgroups II

GODBE RESEARCH Gain Insight

Graduate degree holders were more represented among those who reported driving alone for non-commuting purposes, while proportionately more of those who used public transportation had high school education or less, and annual household income of less than \$50,000.

		Transportation for Non-commuting		
		Drive Alone	Public Transportation	
	High School or less	19.8%	28.0%	
Level of Education	Technical or Some College	17.4%	19.3%	
Level of Education	College Graduate	33.2%	31.2%	
	Graduate Degree	29.6%	21.4%	
	Under \$50,000	21.8%	30.5%	
Annual Household Income	\$50,000 to \$99,999	30.8%	29.2%	
	\$100,000 to \$149,999	16.2%	12.2%	
	\$150,000 or more	15.8%	15.4%	

Transportation for Non-Commuting Difference in Subgroups II

GODBE RESEARCH
Gain Insight

Finally, the respondents driving alone for non-work or school related purposes had higher representation of residents in Napa and Sonoma counties, and of frequent users of I-280. Conversely, there were more Alameda County residents among the public transportation users for non-commuting purposes.

		Transportation for Non-commuting	
		Drive Alone	Public Trans- portation
	Alameda	9.9%	24.7%
	Contra Costa	11.5%	13.9%
	Marin	10.2%	10.4%
	Napa	13.5%	4.2%
County of Residence	San Francisco	9.2%	13.4%
	San Mateo	10.0%	15.1%
	Santa Clara	11.6%	6.8%
	Solano	11.8%	6.1%
	Sonoma	12.3%	5.4%

		Transportation for Non-commuting		
		Drive Alone	Public Trans- portation	
	I-80	19.5%	15.4%	
	I-280	20.0%	12.8%	
Frequentl	I-880	13.3%	18.6%	
y Used Highways or Freeways	I-580	11.6%	14.1%	
	I-680	11.8%	12.8%	
	Highway 101	32.6%	24.9%	
	Other	29.1%	25.0%	
	No highway travel	2.4%	7.7%	

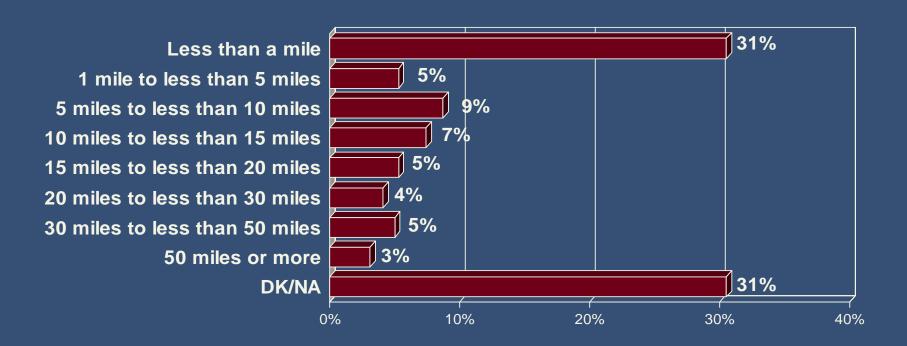


Appendix A: Additional Respondent Information

Commute Trip Length

GODBE RESEARCH Gain Insight

What is your home zip code? What is your work zip code?



Frequently Used Highways

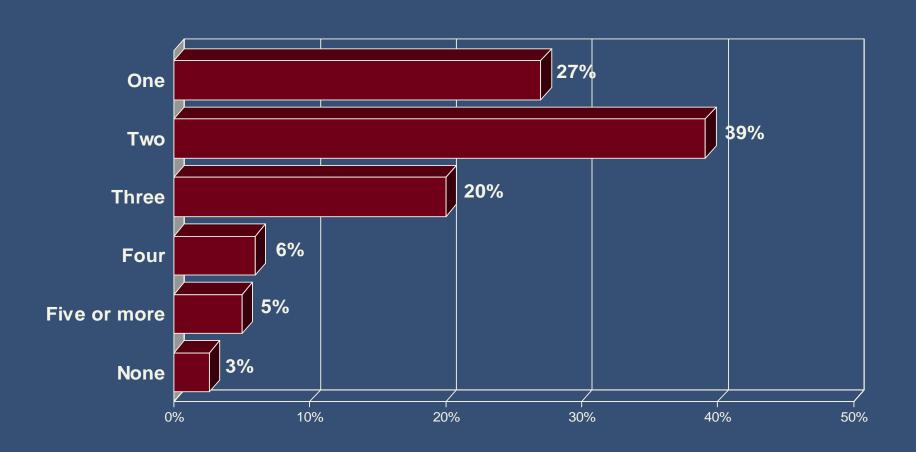
On which major highway or freeway do you travel to go to work, school, or other places you visit frequently?

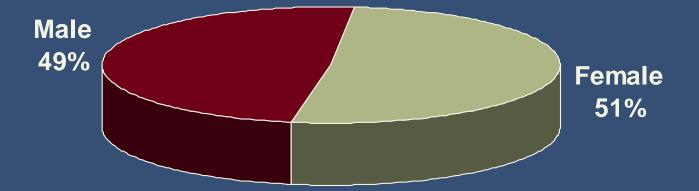
Highway 101	34%	I-5	1%
I-280	20%	Highway 13	1%
I-80	18%	Highway 1	1%
I-880	14%	Highway 29	1%
I-580	12%	Highway 84	1%
I-680	11%	Highway 238	1%
Highway 85	6%	I-380	1%
Highway 24	4%	I-980	1%
Highway 4	4%	Highway 37	1%
Highway 87	3%	Highway 82	1%
Highway 92	2%	No travel on highway or freeway	5.0%
Highway 12	2%	Other	4%
Highway 17	2%	DK/NA	9%
Highway 237	1%		

Automobiles in the Household

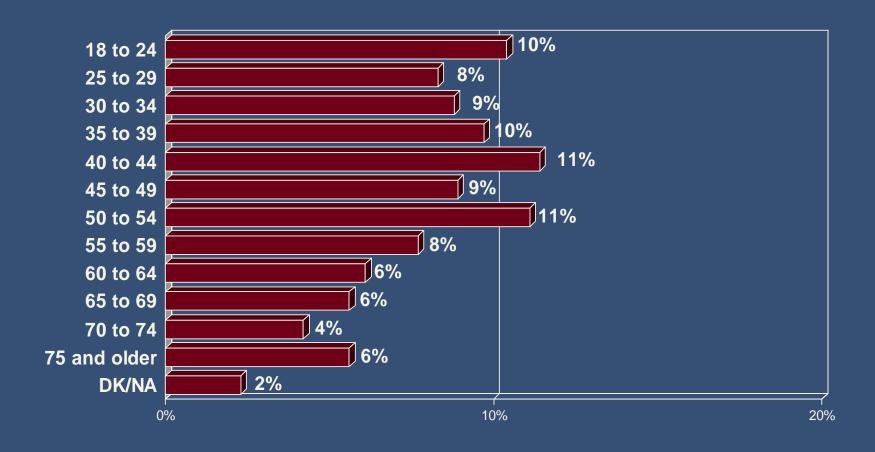


How many automobiles do you have in your household?

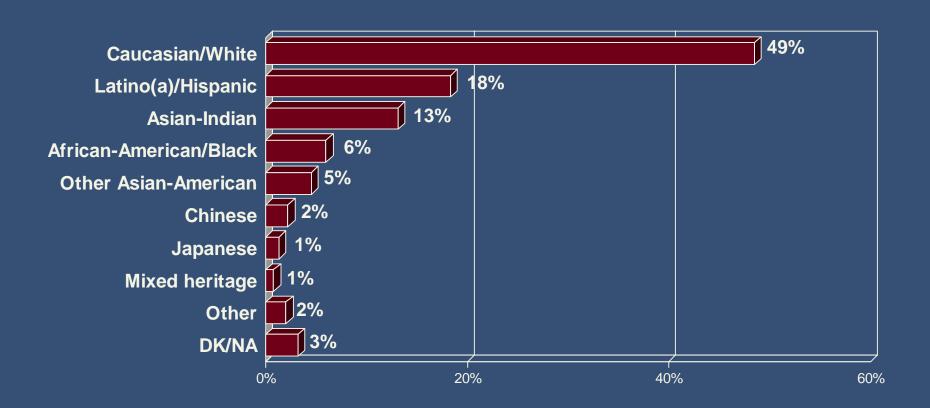




What is your age?



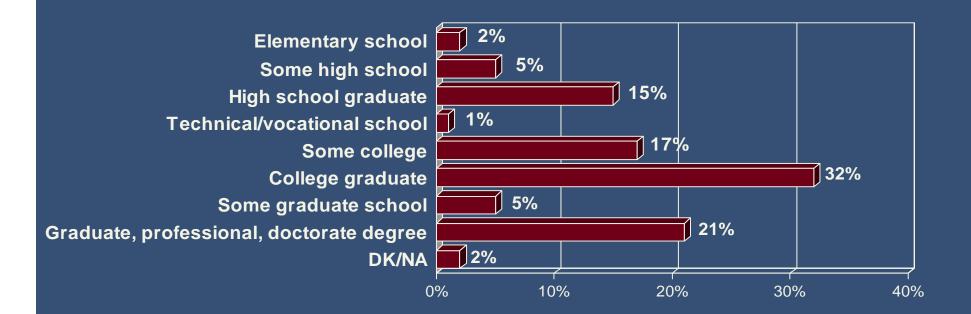
What ethnic group do you consider yourself a part of or feel closest to?



Level of Education



What is the last grade or level you completed in school?



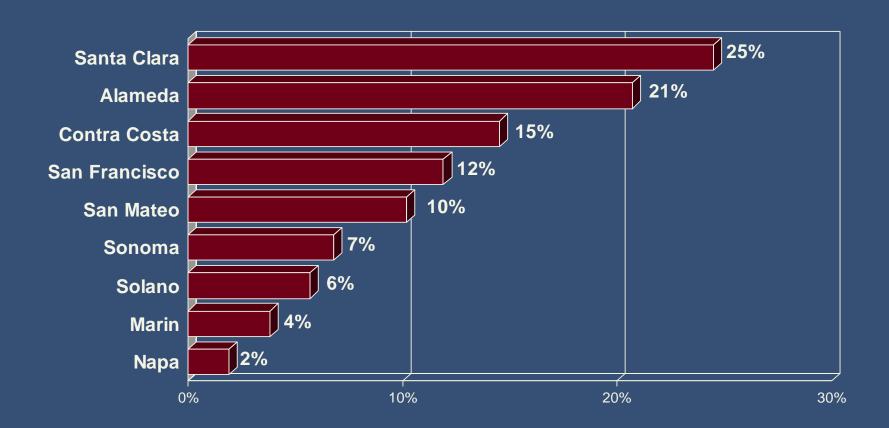
Annual Household Income

GODBE RESEARCH
Gain Insight

Please stop me when I reach the category that best describes your household's total income before taxes in 2007?



County of Residence





Appendix B: Detailed Methodology

Sample Characteristics



A total of 1,800 respondents completed the survey, representing a total universe of approximately 5,313,148 adult residents in the Bay Area, producing a margin of error of plus or minus 2.3 percent. About 3 percent of these surveys were completed in Spanish. Interviews were conducted from February 21 through March 2, 2008 and the average interview lasted 10 minutes.

Sample, Screeners and Weighting

The respondents for this study were selected using random digit dialing (RDD), which randomly selects phone numbers from the active residential phone exchanges within the area of the study. Interviewers first asked potential respondents a series of questions referred to as "Screeners," which were used to ensure that the person lived in the geographic scope of the study and was at least 18 years old.

Once collected, the sample of respondents was compared with the actual adult population Bay Area (based on 2006 US Census Estimates) to examine possible differences between the demographics of the sample of respondents and the actual population universe. The data were weighted to correct differences, and the results presented are representative of the adult population characteristics in the Bay Area in terms of gender, age, and ethnicity. Specifically, the sample was weighted by respondent gender, age, and ethnicity. Furthermore, the data in each of the nine counties was weighted to reflect the actual proportions of the population that each one of them represents in the Bay Area.

Survey Question Randomization

To avoid the problem of systematic position bias, where the order in which a series of questions is asked systematically influences the answers, several questions in the survey were randomized such that the respondents were not consistently asked the questions in the same order. The series of items in Questions 16 and 17 were randomized to avoid such position bias.

Subgroup Comparisons

In addition to looking at the overall results, it is also useful to examine the responses of different demographic and behavioral groups. Generally, Godbe Research comments only on statistically significant differences in key segments in this type of report. The present report highlights statistically significant differences observed in responses by gender, age, ethnicity, level of education, annual household income, transportation modes used, and county of residence for key questions in the survey. For detailed crosstab analysis for the remaining questions, please see Appendix E.

Margin of Error I



Because a survey typically involves a limited number of people who are part of a larger population group, by mere chance alone, there will almost always be some differences between a sample and the population from which it was drawn.

These differences are known as "sampling error," and they are expected to occur regardless of how scientifically the sample has been selected. The advantage of a scientific sample is that we are able to calculate the sampling error. Sampling error is determined by four factors: the population size, the sample size, a confidence level, and the dispersion of responses.

The table on the next page shows the possible sampling variation that applies to a percent result reported from a probability type sample. Because the sample of 1,800 respondents was drawn from the estimated population of approximately 5,313,148 adult residents in the Santa Clara County, one can be 95 percent confident that the margin of error due to sampling will not vary, plus or minus, by more than the indicated number of percent points from the result that would have been obtained if the interviews had been conducted with all persons in the universe. As the table indicates, the maximum margin of error for all aggregate responses is between 1.4 and 2.3 percent for the survey.

This means that, for a given question with dichotomous response options (e.g., Yes/No) answered by all 1,800 respondents, one can be 95 percent confident that the difference between the percent breakdowns of the sample and those of the total population is no greater than 2.3 percent. The percent margin of error applies to both sides of the answer, so that for a question in which 50 percent of respondents said yes, one can be 95 percent confident that the actual percent of the population that would say yes is between 48 (50 minus 2.3) percent and 52 (50 plus 2.3) percent.

The margin of error for a given question also depends on the distribution of responses to the question. The 2.3 percent refers to dichotomous questions where opinions are evenly split in the sample with 50 percent of respondents saying yes and 50 percent saying no. If that same question were to receive a response in which 10 percent of the respondents say yes and 90 percent say no, then the margin of error would be no greater than plus or minus 1.4 percent. As the number of respondents in a particular subgroup (e.g., age) is smaller than the number of total respondents, the margin of error associated with estimating a given subgroup's response will be higher. Due to the high margin of error, Godbe Research cautions against generalizing the results for subgroups that are composed of 25 or fewer respondents.

-	Distribution of Responses				
n	90% / 10%	80% / 20%	70% / 30%	60% / 40%	50% / 50%
2000	1.3%	1.8%	2.0%	2.1%	2.2%
1800	1.4%	1.8%	2.1%	2.3%	2.3%
1500	1.5%	2.0%	2.3%	2.5%	2.5%
1200	1.7%	2.3%	2.6%	2.8%	2.8%
1000	1.9%	2.5%	2.8%	3.0%	3.1%
800	2.1%	2.8%	3.2%	3.4%	3.5%
700	2.2%	3.0%	3.4%	3.6%	3.7%
500	2.6%	3.5%	4.0%	4.3%	4.4%
200	4.2%	5.5%	6.4%	6.8%	6.9%
100	5.9%	7.8%	9.0%	9.6%	9.8%

GODBE RESEARCH Gain Insight

Reading Crosstabulation Tables

The questions discussed and analyzed in this report comprise a subset of crosstabulation tables available for each question. Only those subgroups that are of particular interest or that illustrate particular insights are included in the discussion. Should readers wish to take a closer look at other segments for a given question, the complete breakouts appear in Appendix E. These crosstabulation tables provide detailed information on the responses to each question by demographic and behavioral groups that were assessed in the survey. A typical crosstabulation table is shown here.

A short description of the item appears on the left-hand side of the table. The item sample size (in this case n = 1,800) is presented in the first column of data under "Total."

The results to each possible answer choice of all respondents are presented in the first column of data under "Total." The aggregate number of respondents in each answer category is presented as a whole number, and the percent of the entire sample that this number represents is just below the whole number. For example, among the total respondents, 837 had heard of 511 and this number of respondents equals 47 percent of the total sample size of 1800. Next to the "Total" column are other columns representing responses from men and women. The data from these columns are read in exactly the same fashion as the data in the "Total" column, although each group makes up a smaller percent of the entire sample.

		Gender			
		Total	Male	Female	
	Total	1800	887	912	
1. Have you heard of 511?	Yes	837	431	405	
		46.5%	48.6%	44.5%	
	No	946	450	496	
		52.6%	50.8%	54.4%	
		16	5	11	
	DK/NA	0.9%	0.6%	1.2%	

Subgroup Comparisons

GODBE RESEARCH Gain Insight

To test whether or not the differences found in percent results among subgroups are likely due to actual differences in opinions or behaviors – rather than the results of chance due to the random nature of the sampling design – a "z-test" was performed. In the headings of each column are labels, "A," "B," "C," etc. along with a description of the variable. The "z-test" is performed by comparing the percent in each cell with all other cells in the same row within a given variable (within Gender in the pictured table, for example).

The results from the "z-test" are displayed in a separate table below the crosstabulation table. If the percent in one cell is statistically different from the percent in another, the column label will be displayed in the cell from which it varies significantly. For instance, in the adjacent table, if a significantly higher percent of men (49%) had heard of 511 than the percentage of women (45%), the letter "B" which stands for "Female" respondents would appear under column "A," which stands for "Male" respondents. The letters in the table indicate the differences where one can be 95 percent confident that the results are due to actual differences in opinions or behaviors reported by subgroups of respondents.

It is important to note that the percent difference among subgroups is just one piece in the equation to determine whether or not two percentages are significantly different from each other. The variance associated with each data point is integral to determining significance. Therefore, two calculations may be different from each other according to the percent reported, yet the difference may not be statistically significant according to the "z" statistic.

		Gender			
		Total	Male	Female	
	Total	1800	887	912	
1. Have you heard of 511?	Yes	837	431	405	
		46.5%	48.6%	44.5%	
	No	946	450	496	
		52.6%	50.8%	54.4%	
	DIZ/NA	16	5	11	
	DK/NA	0.9%	0.6%	1.2%	

		Gender		
		Male	Female	
		(A)	(B)	
1. Have you heard of 511?	Yes	В		
	No			
	DK/NA			

Understanding a Mean

GODBE RESEARCH Gain Insight

In addition to the analysis of the percent of the responses, certain results are discussed with respect to a descriptive "mean." Means are the arithmetic averages of responses. For example, to derive respondents' likelihood of using 511 given a feature (Q16), a number value is first assigned to each response category (in this case, Much More Likely = +2, Somewhat More Likely = +1, No Effect = 0). The individual answer of each respondent is then assigned the corresponding number – from +2 to 0 in this example. Finally, all respondents' ratings are averaged to produce a final score that reflects overall likelihood of using 511. The resulting mean makes the interpretation of the data considerably easier.

In the Crosstabulation tables, as well as in some tables and charts throughout the report, for Questions 16 and 17 of the survey, the reader will find mean scores. These mean scores represent the average response of each group. The adjacent table shows the scales for all the three questions. Responses of "DK/NA" were not included in the calculations of the means for any question.

Question	Measure	Scale	Values
Q16 and Q17	Likelihood Ratings	+2 to 0	+2 = Much More Likely +1 = Somewhat More Likely 0 = No Effect

GODBE RESEARCH Gain Insight

Means Comparisons

Only those subgroups that are of particular interest, or that illustrate a particular insight, are included in the discussion within the report with regard to mean scores. A typical crosstabulation of mean scores is shown in the adjacent table.

The aggregate mean score for each item in the question series is presented in the first column of the data under "Total." For example, the information that 511 helps to "Estimate driving times" earned a mean score of 0.9. Next to the "Total" column are other columns representing the mean scores assigned to the respondents grouped by Gender.

The data from these columns are read in the same fashion as the data in the "Total" column. To test whether two mean scores are statistically different, a "t-test" is performed. As in the case of the "z-test" for percents, a statistically significant result is indicated by the letter representing the data column.

	Gender		
	Total	Male	Female
16A. Estimate driving times	0.9	1.0	0.9
16B. Get airport information	0.9	0.9	1.0
16C. Get carpool or vanpool information	0.4	0.4	0.4
16D. Get information about planned transportation disruptions in the Bay Area, such as the Bay Bridge seismic retrofit closure	0.9	0.9	1.0
16E. Get transportation information in the event of an emergency, such as the MacArthur Maze collapse last year or earthquakes	1.3	1.3	1.4



Appendix C: Topline Report



Appendix D: Questionnaire



Appendix E: Crosstabulation Tables